# CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY APPROPRIATIONS, 1953

**MONDAY, MAY 19, 1952**

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, D. C.*

The subcommittee met at 11 a. m., pursuant to call, in room F–39, the Capitol, Hon. Kenneth McKellar (chairman) presiding.

Present: Senators McKellar, Ellender, Cordon, and Stennis.

## CORPS OF ENGINEERS

### TUTTLE CREEK, TORONTO, AND STRAWN PROJECTS, KANSAS

### STATEMENT OF HON. JAMES P. KEM, A UNITED STATES SENATOR FROM THE STATE OF MISSOURI

#### TUTTLE CREEK DAM, KANS.

Chairman MCKELLAR. The committee will come to order.

Senator KEM. I think there are some other Senators here. I have another engagement, and they have been good enough to say that if it was convenient to the Chair I might proceed very briefly.

Chairman MCKELLAR. Go right ahead.

Senator KEM. Mr. Chairman, I appreciate the opportunity of making a short statement in regard to the Tuttle Creek project, which is vital to the protection of Kansas City and other points on the Missouri River.

#### 1953 BUDGET ESTIMATE

The Army engineers this year requested $15,500,000 for the beginning of construction of the Tuttle Creek Dam, but the House Appropriations Committee deleted this item from the civil-functions appropriations bill.

Chairman MCKELLAR. They deleted the entire amount on what grounds, Senator Kem?

Senator KEM. I do not know exactly. In their infinite wisdom, Mr. Chairman, I suppose.

Chairman MCKELLAR. The reason I say that is that this project has been before us a number of times, and the Corps of Engineers feels that it is absolutely necessary.

Senator KEM. Well, that is the way we feel about it.

Chairman McKellar. They feel it is absolutely necessary to build Tuttle Creek Dam.

Senator Kem. We were surprised at the action of the House committee. I think their justification is the general desire to save money.

Chairman McKellar. The budget request was $15,500,000; is that right?

Senator Kem. That is right.

RESTORATION REQUESTED

I hope the Senate committee will see fit to restore these funds which are necessary to initiate the construction of the reservoir.

The people of Kansas City and elsewhere along the Missouri and its tributaries should be provided protection as rapidly as possible against what we had last year and what we are threatened with again this year, that is, disastrous recurring floods.

The Tuttle Creek project is not all the answer, by far, but it is a desirable part of a constructive program that I hope will be framed and carried out.

Chairman McKellar. I think it is a necessary part.

Senator Kem. I agree, Mr. Chairman, the amount requested to initiate construction is less than 2 percent of the direct flood damage resulting from the 1951 floods in the Kansas-Missouri area. It is an infinitesimal amount compared to the $7.9 billion requested by the President for foreign economic and military aid next year.

COMPARISON WITH FOREIGN AID

Under the foreign-aid program, hundreds of millions of dollars taken from the American people have been used to control floods and construct drainage works all over the world. The people of this country should be given priority over the demands of governments overseas.

The Army engineers advise me that present plans call for reserving substantially all storage in the Tuttle Creek Reservoir for flood control, with only a small amount, about 8 percent of the total, being allocated to sediment retention.

From my point of view this is an encouraging sign. I do not believe that the use of dry dams has been sufficiently explored and considered. By this I mean dams with open locks which are closed only in time of emergency and where crops can be raised on the land behind the dams in normal years. We have been building great lakes and reservoirs. We fill them with water and then are disappointed when they do not adequately stop the flow in time of unusual rainfall. Dry dams of the kind I mean have been utilized in the valley of the Miami River above Dayton, Ohio. These dry dams were built following a disastrous flood a number of years ago. I am told that there have been no floods since, and the dams have done exactly what they were designed to do, that is, control the floods.

I believe, Mr. Chairman, that Tuttle Creek Dam is a step in the right direction, and I endorse it.

Chairman McKellar. Thank you very much.

Are there any questions?

We are very much obliged to you, Senator.

LETTERS IN REGARD TO TUTTLE CREEK DAM, KANS.

Senator KEM. Mr. Chairman, may I insert in the record at the end of my remarks two letters from the Kansas City Chamber of Commerce?

Chairman MCKELLAR. Certainly. Without objection, that will be done.

(The letters referred to follow:)

THE CHAMBER OF COMMERCE OF KANSAS CITY,
*Kansas City, Mo., May 14, 1952.*

ARMY CIVIL FUNCTIONS COMMITTEE OF SENATE APPROPRIATIONS COMMITTEE,
*Senate Office Building, Washington, D. C.*

(Attention of Senator Kenneth McKellar, chairman.)

GENTLEMEN: The Chamber of Commerce of Kansas City, Mo., urgently requests that you restore to the President's budget the item of $15½ million for starting construction of the flood-control Tuttle Creek Reservoir on the Blue River, a tributary of the Kansas River. Further delay in the construction of this authorized project will expose the people of the Kansas River Valley and the lower Missouri River to more flood hazards.

The urgent need for this reservoir is emphasized by the President including money for its construction in his budget recommendation for the fiscal year of 1953. Those who advocate delaying appropriations for Tuttle Creek Reservoir pending a report and recommendation of the Missouri River Basin Survey Commission should review the President's statement made at the time he created the Commission, in which he said: "Federal expenditures for resource-development work are necessarily being very sharply limited during the present emergency period. Certain work must go forward, however, even in times like these, in order to strengthen our economic capacity or to prevent serious economic loss. The budget which I shall shortly transmit to the Congress contains minimum funds for this type of work, including the commencement of a limited number of projects which should not be longer delayed."

Obviously, this project is so important that the President considered any delay unwise and, therefore, included $15½ million in his recommended budget.

The Kansas River presents the greatest flood menace of any stream in the United States. This was the opinion of eight of the country's most distinguished engineers who studied flood control for the National Resources Board in 1932 at the direction of the President. This was proved by the record destructive flood of July 1951.

The restoration of local levees to protect farms and cities is costing the Government a substantial sum of money. To delay the construction of Tuttle Creek Reservoir for control of the floodwaters of the Blue River, tributary of the Kansas, is to continue to expose this large investment to the danger of further loss.

The entire Nation was affected by the Kansas River flood of 1951. With services interrupted for many days on the 12 trunk-line railroads that center in Kansas City, shipments were delayed, perishable goods spoiled, and many man-hours of work lost in defense plants and other industries.

The Tuttle Creek Reservoir, after proper engineering studies, was first authorized by Congress June 28, 1938. Again, on December 22, 1944, Congress included Tuttle Creek Reservoir in the general comprehensive plans for flood control. No competent engineers have ever determined that the Tuttle Creek project was not necessary for the control of floodwaters on the Kansas River.

Although the Tuttle Creek item was omitted from the appropriation bill as passed by the House, it did have support of some strong leaders as is evidenced by the following extract from letter we received under date of April 3, 1952, from the Honorable Clarence Cannon, chairman of the House Appropriations Committee, and a member of the subcommittee of the Appropriation Committee on Army Civil Functions: "In response to your request I voted to include an appropriation for Tuttle Creek in the subcommittee when the bill was drafted. And on roll call I voted to include an appropriation for Tuttle Creek in the whole committee. And on the floor of the House I voted to earmark money for Tuttle

Creek, and to make an appropriation for Tuttle Creek, on voice votes and on division, and I passed through the tellers in favor of the Scrivner amendment."

The thousands of wrecked homes, ruined farms, and destroyed businesses are fresh evidence demanding immediate construction of Tuttle Creek Reservoir. The thousands of homes that lie in heaps of rubble are terrible monuments to our past delays in building flood-control works.

We urge you to appropriate the amount included in the budget to start construction now on the Tuttle Creek Reservoir.

Respectfully,

THE CHAMBER OF COMMERCE OF KANSAS CITY,
C. J. KANEY, *President.*
GEORGE W. CATTS, *Executive Manager.*

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THE CHAMBER OF COMMERCE OF KANSAS CITY,
*Kansas City, Mo., March 25, 1952.*

Maj. Gen. LEWIS A. PICK,
*Chief of Engineers, Department of the Army,*
*Pentagon Building, Washington, D. C.*

DEAR GENERAL PICK: On February 26 a strong delegation of leaders from the Kansas River Basin and the lower Missouri appeared before the Army Civil Functions Committee of the House Appropriations Committee to urge that the $15½ million provided in the President's budget to start construction on the Tuttle Creek Reservoir on the Blue River above Manhattan, Kans., be recommended by this subcommittee to the full Appropriations Committee. The Congressmen from the various affected districts in Kansas and Missouri assisted our delegation in making what we thought was a commendable showing.

Mr. Cannon, of Missouri, a member of the subcommittee and chairman of the House Appropriations Committee, told one of our delegates after the hearing that we had made a good presentation.

Nevertheless, we have no assurance as to what action this subcommittee is going to take. We have reasons to believe there is some question about their recommending money for the start of construction on the Tuttle Creek project.

When this matter is before the Senate Appropriations Committee, we hope that you will prevail upon them to recommend favorably the Tuttle Creek item if it is continued in the budget sent over from the House. If it has been eliminated, we hope that you will urge the Senate committee to return it to the budget as originally recommended by the President.

Since the Tuttle Creek project was first authorized by Congress in 1938, every engineering report on flood protection for the Kansas River Basin has agreed that Tuttle Creek in some form is the very key to any program. Not only has it been recommended by independent engineers, but the Army engineers again reviewed it in 1944 and again since last year's disastrous flod and found it essential. Recently the chief engineers of all 13 railroads serving the Greater Kansas City district have said Tuttle Creek, at least on a dry dam basis, is absolutely imperative to protection of the lower valley and work on it should proceed at once to supplement the restored levees. Whatever the commission named by the President to review a policy for the entire Missouri Valley Basin may recommend on dams, levees, and soil conservation, Tuttle Creek is still a fundamental in any program and certain to be included. Floods don't wait on Congress or reviews. Tuttle Creek won't solve the problem but it will give added security while the full program is worked out. Our communities have done a great job of restoration. There is much yet to be done. But there will be a feeling of insecurity, almost despair, if we have to wait still another year before a start is made on this project of Tuttle Creek, which is essential to any program proposed.

We are most appreciative of the interest taken last fall by Senator McKellar and members of his committee when they inserted $5 million in the budget to start the construction on Tuttle Creek. If we cannot get construction money for Tuttle Creek included in the 1952 budget, it will look to our people out here like Congress wants us to sit and wait for the next disastrous flood, which is sure to come. We will apreciate your conveying our feelings to the Senate

committee, as well as urging the appropriations of funds for Tuttle Creek construction.

Each of us sends you his kind regards and best wishes.

Sincerely yours,

WILLARD J. BREIDENTHAL,
*Chairman, Great Kansas City Flood Protection Planning Committee.*
CLIFF J. KANEY,
*President, Chamber of Commerce, Kansas City, Mo.*
O. W. DAVIS,
*President, Chamber of Commerce, Kansas City, Kans.*
ROY A. ROBERTS.
JOHN B. GAGE.
TOM L. EVANS.
Mayor WILLIAM E. KEMP.
Mayor CLARK E. TUCKER.

## STATEMENT OF HON. ANDREW F. SCHOEPPEL, A UNITED STATES SENATOR FROM THE STATE OF KANSAS

KANSAS FLOOD-CONTROL PROJECTS

Senator SCHOEPPEL. Mr. Chairman, I note Senator Hennings from Missouri here. Some of these gentlemen may be pressed for time. Whatever is the desire of the chairman on that is going to meet with our entire approval.

Senator HENNINGS. Mr. Chairman, I would certainly like to have Senator Schoeppel go ahead.

Senator SCHOEPPEL. Senator McKellar, and the other members of the committee: We have a number of witnesses here with reference to a number of these projects. What we would like to do is to conserve as much of the time as possible, so I am going to move right along.

We are going to start by calling these gentlemen here who are interested in some of these projects. We thought it advisable to start at the southeast end of this picture, which is the Neosho and the Verdigris, and I want to call on Mr. John Redmond from Burlington, Kans., who is the president of the Neosho-Cottonwood Flood Control Association. He will present the situation as he views it at this time.

Chairman MCKELLAR. Come around and have a seat, if you wish, or stand, just as you like.

## STATEMENT OF JOHN REDMOND, BURLINGTON, KANS., PRESIDENT, NEOSHO-COTTONWOOD FLOOD CONTROL ASSOCIATION

GRAND-NEOSHO FLOOD-CONTROL PROJECT

Mr. REDMOND. Mr. Chairman, my name is John Redmond, Burlington, Kans. I am the editor and publisher of a small daily paper and the president of the Neosho-Cottonwood Flood Control Association, which represents all of the cities on the Neosho-Cottonwood watershed with the exception of two, the boards of county commissioners for most of the 11 counties, the township levee districts, and other tax units which are affected by flood control, and the chambers of commerce and civic and commercial organizations. Practically all of them in the whole watershed have endorsed the Neosho project, what you call the Grand-Neosho project, which includes four dams, authorized.

PLANNING FUNDS REQUESTED

First, I want to thank the committee for the privilege of appearing here to represent the Neosho and for the action of the Senate in putting us in for the first appropriation for planning. We are asking now for the additional $100,000.

Chairman McKellar. May I interrupt you for just a minute?

Mr. Redmond. Yes, sir.

Chairman McKellar. I do not know why, but the House has cut out all new planning funds for the United States. But we are planning dams and building them all over the world in other places.

Mr. Redmond. Yes, sir.

Chairman McKellar. I think we are making a mistake about that. I think we ought to do a little more planning for ourselves, and we ought to go on with dam building. I am very frank to say—I have not heard what you have to say about this particular project—that we have heard very fully from the two Kansas Senators and various other witnesses representing the Corps of Engineers that this dam that Senator Kem spoke of a few moments ago is very necessary to be built. I have been convinced of the need of that particular dam. I think it ought to be built.

STRAWN DAM PROJECT, KANSAS

Mr. Redmond. I might say that the detail project report for the Strawn Dam for which we are asking that additional $100,000 is practically ready and will be ready very soon.

Chairman McKellar. How much are you asking for?

Mr. Redmond. We are asking for $100,000 for that project.

Chairman McKellar. For planning?

Mr. Redmond. For the final plans to be ready to submit for bids if and when the appropriation is made.

Chairman McKellar. All right, sir.

Mr. Redmond. Much has been said about controlling floods by united action of the various Federal agencies on small watersheds, and of the need of cooperation on major streams. The Neosho watershed in Kansas offers an opportunity to test the value of the complete soil conservation practices recommended by the Soil Conservation Service and the multiple purpose dams recommended for flood control, water conservation, and so forth, as recommended by the Corps of Engineers and authorized by the Congress.

The Neosho is the only comparable watershed on which flood-control projects recommended by the Corps of Engineers as requested by the people concerned, and authorized by Congress, on which the Soil Conservation Service has also completed a survey which has been approved by the Department of Agriculture, passed by the Bureau of the Budget, and is now in the hands of the Public Works Committee of the House for authorization.

The Neosho watershed with its rainfall varying from as little as 14 inches to as much as 65 inches in a year, with no other source of water supply, offers no economically justifiable need of storage of water for power or navigation or irrigation, other than incidental bank-side irrigation of small tracts without permanent irrigation structures.

CONTROL OF NEOSHO FLOODS

This would be an opportunity to show how completely the four dams recommended by the Corps of Engineers will control the Neosho's floods. It would show if the watershed in Kansas can be put under the complete soil-conservation practices recommended by the Soil Conservation Service, and how long it would take, and what is would accomplish.

Numerous watershed associations, and so forth, have been formed in Kansas and some of them incorporated, but no taxing unit to meet the SCS requirements for Federal aid on even a small watershed project has yet been formed, although several unsuccessful attempts at organization have been made.

In suggesting a test of both Soil Conservation and Corps of Engineers projects on the Neosho watershed in Kansas, we realize that it will take many years to get the cooperation of farmers necessary to put the soil conservation plans into practice on the scale required by the SCS for Federal participation, because of the operators of average size farms have the same reluctance to having a dam on their rich creek bottom land as the owners of large ranches opposing the dams recommended by the Army engineers have to locating the larger dams on their rich river or creek bottom land.

We therefore beg of you to authorize the Soil Conservation Service plan for the Neosho watershed in Kansas, and to appropriate the money necessary to complete plans for the four authorized dams on the Neosho, and to appropriate construction money for the dams at the earliest possible moment, that a start may be made toward the urgently needed protection from disastrous floods, and the preservation of the rich agricultural lands of the Neosho watershed.

PUBLIC HEALTH FACTOR

Mr. REDMOND. The Neosho-Cottonwood Valley Flood Control Association represents practically all of the taxing units in the valley, as well as commercial and civic organizations and many other groups and organizations and thousands of farmers and others damaged by the floods.

Public health, an important phase of the benefit to be accrued through construction of the four reservoirs authorized on the Neosho (Grand) River in Kansas, has not been given the consideration it deserves. The Neosho River is the most heavily used stream in Kansas as a source of municipal water supply, according to Dwight F. Metzler, chief engineer and director of the division of sanitation of the Kansas State Board of Health. In a letter written June 23, 1947, Mr. Metzler said:

> During some seasons more water has been used for municipal purposes than was naturally flowing in the stream. Under these conditions the water was reused repeatedly as it passed downstream and the sewage was returned to supply the next town. In one city the water below the sewage plant was repumped during an extremely dry period, to the water works intake in order to keep it supplied with water.
>
> Of course the problem of pollution increases as the flow decreases. The Neosho is the source of disposal of sewage and industrial wastes from the cities in the basin, and the value of the water for reuse decreases as the flows decrease and the pollution increases. In addition to the organic wastes, mineral waters enter

the stream. Some of these can be treated only by increasing the amount of dilution. Brines which are contributed by oil production processes are an example of this type of pollution.

In a letter dated April 9, 1952, to John Redmond, Burlington, Kans., Mr. Metzler wrote:

As you know, the Neosho River is the most heavily used of the rivers of Kansas as a source of municipal water supply. In a letter to you dated March 7, 1949, I mentioned that there were 3 days in 1936 when there was no flow in the river at Iola, and there were 49 days the same year when there was no flow at Parsons.

The printed report of the Kansas State Board of Agriculture dated August 1947 on the Neosho River Basin plan of State water resources development, by the division of water resources, included a hydrograph shown as an insert in that printed report, to which your attention is called.

DROUGHT PERIODS

The same report contained a table showing the number of days in which the discharges, within varying limits, have occurred. This table shows that in the years from 1922 through 1945, inclusive, there were 8 years of record when there were periods varying from 3 to 122 days when the discharge never exceeded 20 cubic feet per second. During the severe drought which prevailed generally in the decade ending in 1940, the stream ceased to flow for 18 days in 1934, 49 in 1936, and 25 days in 1939.

There have been no drought periods since the publication of that report. In fact, since then the Neosho floods at Burlington set new high records three times in the 12 months from the last of April 1944 to the 1st of April 1945. In 1948 the river went much higher than ever before, and in July 1951 was as much as 8 and 10 feet higher than in 1945, which was the record flood up to that time. These floods damaged many municipal water, light, and sewer plants and threatened others, creating widespread hazards to health.

NO UNDERGROUND WATER SUPPLY

The cities have for many years secured their municipal water from the Neosho and Cottonwood Rivers and they have many thousands of dollars invested in their plants, which in normal years provide an ample supply of approved water. They have no other source of supply available at a cost they can afford to pay. The underground water supply in the Neosho Valley in dry seasons is not sufficient to even supply towns of 500 population, and cannot be counted on in times of extended drought. The situation on the Cottonwood is the same.

The cities along the Neosho are, according to Mr. Metzler of the division of sanitation of the State board of health, making considerable progress toward improving municipal sewage treatment. He writes:

Parsons is expanding its sewage treatment plant and Chanute is constructing a new facility.

Improved operation and additional treatment facilities are necessary; however, minimum stream flows need to be increased in order to reduce the hazard from municipal pollution and assure adequate quantities of water to the city water treatment plants.

The conservation pools in the four authorized reservoirs would provide the water necessary to guarantee these 14 cities an adequate supply of safe water to meet their present needs, with some to spare for possible increased future needs. They would also provide for recreation, wild life, and other incidental benefits.

The city of Parsons, Kans., one of those most vitally interested in securing an adequate water supply, is the home of the big defense plant which has an important part in defense production.

### NEOSHO RIVER FLOW

The Neosho problem is simple and twofold. We have too much water, as much as 65 inches in a year, and we have too little, as little as 14 inches in a year. Our problem is one of stream-flow regulation in periods of drought and for flood control in the flood periods, which have been coming with greatly increasing frequency and height and velocities.

We want to call your attention to the fact that the United States Geological Survey says that the drainage area of the Neosho is practically one-tenth of that of the Kansas or Kaw River on which Tuttle Creek is located. The discharge at Parsons on the Neosho was 410,000 cubic feet per second compared to 479,000 cubic feet per second on the Kaw River at Topeka. That is in spite of the fact that the drainage area is only one-tenth as great, which accounts for the great damage done by the direct current in the upper portions of the stream where the current was swift and the fall was greater, and in the lower part where it struck the various cities and towns along the river, knocking out their water supply, sewage systems, and their other utilities.

### HEALTH ASPECT

On the health question the State sanitary department of the State Board of Health says that the Neosho is the most used stream in Kansas. Fourteen cities and towns get their water supply from it and dump their sewage into it. In times of drought we have had some very extended periods of the water being used over and over as it passes through the towns downstream. I think the committee will admit that it is not a palatable thought to drink sewage, even if it has been treated by two or three towns before it.

There have been, according to the figures, 3 days of no flow at Iola and 49 days at Parsons in 1936 when the river ceased to flow, but the towns still used the water.

In the years from 1922 to 1945 there were periods of from 3 days to 122 days in the year when less than 20 cubic feet per second of discharge occurred, which indicates the need of a conservancy. So if we are to get our value from the dams, we have to have the conservation pools which the four dams provide.

We want to call attention to the fact that the Neosho watershed, as I understand it, is the only one on which the plans of the Army engineers have been approved or authorized and on which the Soil

Conservation Service has submitted a report for soil and water conservation on the watershed. In our State we have had a lot of talk about watershed treatment, and our association has gone on record as of 3 years ago at the hearing before the House Public Works Committee is favoring the authorization of that soil-conservation plan, and we wish to do so again.

I have a statement covering that which I would like to have inserted in the record.

Chairman McKeller. Without objection, it may be placed in the record.

Mr. Redmond. I have a letter from Judge Thomas, of Miami, Okla., which I would like to have inserted in the record.

Chairman McKellar. It may be placed in the record, without objection.

Mr. Redmond. I also have a letter to submit from the chairman of the executive committee of the Kansas State Grange Association, which was handed to me to present, correcting a statement by one of the opponents of all of our dams who classed the Kansas State Grange as being opposed to the Army engineers so-called big dams.

RESOLUTION OF STATE GRANGE

Instead of opposing the dams, a resolution was passed by the Kansas State Grange at its annual session in October 1951, which appears on page 56 of the printed proceedings. The resolution states:

> The recent floods have recently demonstrated the need of adequate flood protection, and development of a plan or program of flood protection which will protect urban, rural, and utility properties alike. To accomplish such we insist upon adoption of a flood-control program which embraces departments of government skilled in land and water uses, as well as departments primarily interested in navigation; therefore, we recommend a flood-control program administered by the joint planning of the Soil Conservation Service, the Agricultural and Reclamation Department, with cooperation with the Corps of Army Engineers; and one which embraces flood control on a watershed basis, and one which embraces a thorough conservation erosion control and land-use program.

Chairman McKellar. Without objection, that will be placed in the record.

Mr. Redmond. I think you are familiar with the details of the projects, and it is not necessary for me to call your attention to the plans. They have been authorized and thoroughly discussed a great many times.

PLANNING FUNDS REQUESTED

I want to say again briefly that we think that our project is worthy, that it is tremendously urgent both from the flood-control standpoint and from the health standpoint. We urgently urge that you include this $100,000 of planning money in the appropriations for this coming year, so that we may be ready to act promptly if the Korean disturbance ends and work and employment becomes a problem.

I thank you.

Chairman McKellar. We are very much obliged.

Are there any questions?

(The documents submitted by Mr. Redmond follow:)

STATE OF OKLAHOMA,
OFFICE OF THE DISTRICT COURT,
OTTAWA AND DELAWARE COUNTIES,
*Miami, Okla., April 15, 1952.*

MR. JOHN REDMOND,
*Burlington, Kans.*

DEAR SIR: The following is as near an accurate statement as we are able to obtain as to flood damage caused in Ottawa County by reason of the July 1951 flood on the Neosho River. Our county is vitally concerned in the construction of the Strawn Dam on the upper Neosho, in fact we feel that is the only feasible protection that our county can obtain from super floods is through the construction of these flood-control dams. I am convinced after careful study of the Army engineer's data that the Strawn Dam alone would have reduced the elevation of the flood in this county by 5 feet and would have reduced the amount of damage sustained by reason of the flood a total of 60 to 70 percent.

Attached hereto you will find the Corps of Army Engineers, United States Army's official report of estimated flood damage in Ottawa County which is broken down in such a way it can be easily understood. I know of my own knowledge that the engineers sent many competent men into the county and made this survey themselves by personal contact and observation; that they were reasonably conservative in the estimating of damages.

The Army engineers' Report shows the total estimated flood damage in the July 1951 flood at $2,811,000 in Ottawa County. I call your attention to the fact that no estimate is included in their report of the depreciation in the value of the real estate in Ottawa County by reason of injuring the reputation of the real estate by the demonstration of the height that the water will get on property in a super flood and by causing thousands of acres of property and hundreds of houses to be classed as flood property which never was classed in overflow territory before. I could conservatively say that the damage through depreciation to values of property which can never be restored except through the establishment of flood-control dams that will eliminate the damage of such floods would be at least $2½ million additional, on that basis the total flood damage in Ottawa County would be $5,311,000.

We join earnestly in urging the committee in the hearings on April 22, 1952, to include an appropriation of $100,000 this year to complete the plans on the Strawn Dam.

Sincerely yours,

WM. M. THOMAS,
*District Judge.*

Also on behalf of the Miami Chamber of Commerce.

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CORPS OF ENGINEERS, UNITED STATES ARMY,
*Tulsa, Okla., April 10, 1952.*

Mr. W. R. WRIGHT,
*Manager, Chamber of Commerce,*
*Miami, Okla.*

DEAR MR. WRIGHT: In conformance with your telephonic request to me on April 7, 1952, information pertaining to damages caused by the July 1951 flood in Ottawa County, Okla., is contained in the following tabulation:

| *Item* | *Amount* |
|---|---|
| Overflow area: | |
| Rural area flooded (acres) | $20,900 |
| Urban area flooded (acres) | 750 |
| Subtotal | 21,650 |

| | |
|---|---|
| Estimated flood damage: | |
| Rural: | |
| Crop | $351,000 |
| Noncrop | 266,000 |
| Subtotal | 617,000 |
| Urban | 2,194,000 |
| Total estimated flood damage | 2,811,000 |

The losses contained in the preceding table were obtained from a detailed damage survey by personnel of this office following the July 1951 flood. For a flood of this magnitude, there are always large intangible effects which cannot be evaluated in monetary terms, such as disruption of orderly social processes, human suffering, adverse health and sanitary conditions, and interruptions to normal transportation services wherein the time element is an important factor.

It is hoped that the above information will meet your needs; however, if additional data are desired, please feel free to call on us.

Very truly yours,

H. D. WESTON,
*Lieutenant Colonel, Corps of Engineers, Executive Officer*
(For the District Engineer).

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*To the Senate Subcommittee on Civil Functions, Senate Appropriations Committee:*

Published reports of a recent hearing before the Civil Functions Committee of the House Appropriations Committee on a request for funds for flood control in Kansas quoted one Dwight Payton, an editor, opposing the recognized plans for flood control, as saying the Kansas State Grange is opposed to the Corps of Engineers methods of flood control. Classing the Kansas State Grange as opposed to flood control seems to be in keeping with others of his statements, and certainly is not in line with the facts.

I am chairman of the executive committee of the Kansas State Grange and know of my own personal knowledge that the Kansas State Grange is not opposing dams to control floods in Kansas. Hundreds of members of the grange in Kansas have suffered severe losses in the oft-recurring floods, and are anxious for prompt action by the Congress to permit the construction of dams authorized where the cost and benefit ratio is favorable.

Instead of opposing flood control on the Neosho and other Kansas streams, the Kansas State Grange at its eightieth annual session held at Chanute, Kans., in October 1951, adopted the following resolution, which appears on page 56 of the printed proceedings of that session:

"The recent floods have recently demonstrated the need of adequate flood protection, the development of a plan or program of flood protection which will protect urban, rural, and utility properties alike. To accomplish such we insist upon adoption of a flood-control program which embraces departments of Government skilled in land and water uses, as well as departments primarily interested in navigation; therefore we recommend a flood-control program adminstered by the joint planning of the Soil Conservation Service, the Agricultural and Reclamation Department (with) cooperation with the Corps of Army Engineers; and one which embraces flood control on a watershed basis, and one which embraces a thorough soil-conservation, erosion-control, and land-use program."

Burlington, Kans., May 12, 1952.

JAS. W. INGWERSEN,
*Chairman, Executive Committee, Kansas State Grange.*

SOIL CONSERVATION SPOKESMAN SAYS DAMS NEEDED TO CONTROL FLOODS

The one strong point emphasized by the Army engineers and the Soil Conservation Service representatives at the joint meeting of groups from the Neosho-Cottonwood and Mairais des Cygnes watersheds at Burlington Tuesday, was the fact that soil conservation alone will not control major floods on those streams. This was made clear by Kirk Sandals, chief of the water conservation division

of the fifth region of the SCS as the personal representative of A. F. McClymonds, head of the six-State region which includes Kansas.

Mr. Sandals in his talk quoted largely from the address made by Mr. McClymonds at a soil conservation meeting held at Topeka last April but which received little publicity in the Topeka papers. Mr. Sandals reiterated the statement by Mr. McClymonds that, "We in the Soil Conservation Service do not claim that we can control major floods with our kind of work alone. Some of the peak flow can be cut down, and this will help, but for the heavier floods there will be needed additional controls in the way of reservoirs, levees and other main channel operations."

Many questions on this subject were asked from the floor with specific reference to several small water sheds on which those opposed to the accepted flood-control plan claim soil-conservation practices are controlling floods. Mr. Sandals and C. D. Sanders, flood-control assistant for the fifth region, tried to make it very clear, that while there are many small water sheds on which floods may be controlled by soil-conservation methods alone, such practices would not control floods on the major streams in Kansas.

The question and answer period in which most of the questions were asked by those opposed to the recognized flood-control methods, was interesting and informative.

Preceding the talk by Mr. Sandals, Col. Edward G. Herb, district engineer of the Tulsa district Corps of Engineers whose district includes the Neosho water shed, gave a general outline of the provisions of the Federal laws which place flood-control in the hands of the Corps of Engineers by way of the Department of Defense, and the soil conservation through the Department of Agriculture. Each has a definite part in the joint effort to conserve soil and water and to prevent floods.

Colonel Herb said the status of the projects for flood control on the Neosho was unchanged. The four dams have been authorized, but no money appropriated for planning or construction because of the Korean emergency. It was Colonel Herb's first appearance at a meeting in the valley and he was well received.

The meeting being a joint one with the Marais des Cygnes group because of the similarity of the problems on the two streams, Col. Lawrence J. Lincoln, district engineer of the Kansas City district of which the Marais des Cygnes is a part, discussed the situation in that valley. The Marais des Cygnes project has yet to be authorized by the Congress, but is ready for it. Many of the questions came from those interested in the Marais des Cygnes.

As announced in the publicity concerning the meeting, the main objective was to give the people interested a chance to ask questions. From that point, as well as in interest and attendance, the meeting was a real success.

The meeting was opened by John Redmond, president of the Neosho Valley group, who introduced George A. Fox, of Chetopa, executive vice president of the association, who introduced Colonel Herb. Mr. Fox introduced Lamar Phillips, of Ottawa, representing the Marais des Cygnes, who introduced Colonel Lincoln.

Sitting on the panel during the question period in addition to the three main speakers were C. D. Sanders, flood-control assistant of the regional SCS office; Dwight F. Metzler, of the sanitary department of the State board of health, who answered the questions concerning stream pollution; W. H. Sunderland, senior engineer of the water-resources division of the State board of agriculture; Mr. Michaels, of the State highway department.

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KANSAS STATE BOARD OF AGRICULTURE, WATER RESOURCES DEVELOPMENT

LOW-WATER FLOW[1]

The Neosho River is subject not only to destructive floods but to extremely low-flow conditions as well. In 1936 there was no flow in the river at the Parsons gage for 49 consecutive days. In 1939 there occurred a 3-month period during which the river flow never exceeded 5 cubic feet per second, including 25 days of zero flow.

The variation in flow of the Neosho River at the station near Parsons for the years 1922–45 is summarized in table V. This table segregates the number of

days in which the discharges, within various limits, have occurred. During these 24 years discharges have exceeded 100 cubic feet per second nearly 80 percent of the time. In each of the 7 years, 1927, 1928, 1929, 1941, 1942, 1944, and 1945, the flow was never less than this amount. By contrast, in each of eight other years of record there were periods, varying from 3 to 122 days, when the discharge never exceeded 20 cubic feet per second. During the severe droughts which prevailed generally in the decade ending in 1940, the stream ceased to flow for 18 days in 1934, 49 days in 1936, and 25 days in 1939. The total number of these days of zero flow is only 1.3 percent of the period of record, although more than half of them occurred in 1 year and all of them within a period of 6 years.

FLOOD DAMAGES

The earliest white settlers of the Neosho Basin had cause for concern about the flood problem. The following is quoted from an article on the climatology of Kansas by T. S. Jennings: "About the last of February or first of March 1826, heavy rains began in what is now the southeast quarter of the State, raising the Neosho and its tributaries out of their banks and flooding their bottoms; heavy rains continued in the Territory during the season. * * * In the fall a destructive flood swept down the Neosho, carrying away wigwams, houses, and gathered and ungathered crops."

Seldom does a year pass without a flood being recorded in some portion of the Neosho River Basin. In the year 1927 eight overflows occurred on the Neosho River at Oswego. During the period 1900 to 1946, bank-full stages were exceeded 54 times at Emporia on the Cottonwood River, 58 times near Emporia on the Upper Neosho River, and 78 times at Oswego on the Lower Neosho.

Maximum flood stages and peak discharges for the period of record at various gaging stations are shown in appendix A. The following paragraphs contain brief descriptions of some of the major floods and estimates of flood damages to crops and other property.

Approximately 300,000 acres along the main stem and major tributaries are subject to flooding. The acreage in various counties subject to inundation is listed in table VI. The entire flooded area in the basin is shown in blue on the map attached to this report. The overflow area is predominantly agricultural in character, although some urban property, including commercial, industrial, and residential development, is located in the flood plain. It has been estimated that approximately 69 percent of the area subject to overflow is in cultivation.

TABLE V.—*Analysis of low flows, Neosho River at Parsons*

| Discharge (second-feet) | Total days | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 to 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 to 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 35 | 0 | 32 |
| 21 to 50 | 78 | 0 | 0 | 31 | 21 | 0 | 0 | 0 | 23 | 48 | 23 | 53 |
| 51 to 100 | 41 | 34 | 8 | 26 | 25 | 0 | 0 | 0 | 70 | 24 | 57 | 87 |
| More than 100 | 246 | 331 | 358 | 308 | 319 | 365 | 366 | 365 | 269 | 258 | 286 | 193 |
| | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| 0 | 18 | 0 | 49 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 to 4 | 28 | 0 | 6 | 0 | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 to 20 | 11 | 0 | 21 | 7 | 0 | 34 | 56 | 0 | 0 | 0 | 0 | 0 |
| 21 to 50 | 52 | 9 | 40 | 75 | 30 | 17 | 76 | 0 | 0 | 0 | 0 | 0 |
| 51 to 100 | 73 | 16 | 61 | 46 | 82 | 77 | 56 | 0 | 0 | 22 | 0 | 0 |
| More than 100 | 183 | 340 | 189 | 237 | 253 | 149 | 178 | 365 | 365 | 343 | 366 | 365 |
| | Percent of time | | | | | | | | | | | |
| | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 to 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 to 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 9.6 | 0 | 8.8 |
| 21 to 50 | 21.1 | 0 | 0 | 8.5 | 5.7 | 0 | 0 | 0 | 6.3 | 13.1 | 6.3 | 14.5 |
| 51 to 100 | 11.2 | 9.3 | 2.2 | 7.1 | 6.9 | 0 | 0 | 0 | 19.2 | 6.6 | 15.6 | 23.8 |
| More than 100 | 67.7 | 90.7 | 97.8 | 84.4 | 87.4 | 100 | 100 | 100 | 73.7 | 70.7 | 78.1 | 52.9 |
| | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 |
| 0 | 4.9 | 0 | 13.4 | 0 | 0 | 6.8 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 to 4 | 7.7 | 0 | 1.6 | 0 | 0 | 17.2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 to 20 | 3.0 | 0 | 5.7 | 1.9 | 0 | 9.3 | 15.3 | 0 | 0 | 0 | 0 | 0 |
| 21 to 50 | 14.2 | 2.5 | 11.0 | 20.6 | 8.2 | 4.7 | 20.8 | 0 | 0 | 0 | 0 | 0 |
| 51 to 100 | 20.0 | 4.4 | 16.7 | 12.6 | 22.7 | 21.1 | 15.1 | 0 | 0 | 6.0 | 0 | 0 |
| More than 100 | 50.2 | 93.1 | 51.6 | 64.9 | 69.1 | 40.9 | 48.8 | 100 | 100 | 94.0 | 100 | 100 |

Senator SCHOEPPEL. I understood that Senator Hennings had to attend another meeting, and we would like to have him appear at this time.

Chairman MCKELLAR. Without objection, that will be done.

## STATEMENT OF HON. THOMAS C. HENNINGS, JR., A UNITED STATES SENATOR FROM THE STATE OF MISSOURI

### TUTTLE CREEK RESERVOIR, KANS.

Senator HENNINGS. Thank you very much. With the permission of the chairman and the members of the committee, I would like to make a brief statement at this time.

Senator SCHOEPPEL. That is all right. We are glad to have you.

Senator HENNINGS. I am glad you and your good people from Kansas are willing to bear with me at this time.

Mr. Chairman, before testifying briefly on just a few of the projects which are of great concern to the people of my State, I would like to take this opportunity to express a word of appreciation to you and to the members of your committee. On behalf of the people of

Missouri and other flood-stricken people throughout the valley, I want to thank you, Mr. Chairman, and this committee for the generous understanding which you have shown in connection with the flood problems of our basin. The recurrent floods in the Missouri Basin not only bring calamity and disaster to that area, but the resulting dislocations have a serious effect on the economy of the entire country and upon our defense effort. Not only is the damage wrought to farm and industrial production tremendous, but the loss of our natural resources and the wealth of our Nation is beyond calculation.

### 1951 FLOODS

Last summer the Kansas-Missouri area suffered one of the worst floods in the history of our country. The extent of the destruction at that time is so well known, I am sure, to the members of this committee that I feel it is unnecessary for me to detail again what it meant in terms of human misery, in terms of the loss of productive capacity, the destruction of livestock, the ruin of crops, the disruption in transportation of vital defense materials, and the loss of business and man-hours and of wages. Immediate relief and rehabilitation measures were urgently needed, and the Congress met the appeal for emergency relief by promptly appropriating $25 million in disaster funds—an inspiring demonstration of the sympathy and generosity of the American people to their fellow citizens in distress.

The disastrous floods last summer were caused by excessive rainfall in Kansas and the tremendous volume of water poured into industrial Kansas City through the Big Blue and Kansas Rivers. The huge damage pointed up in no uncertain terms the necessity for real and effective protective measures.

It is perfectly true, of course, that large expenditures for flood control must be considered not only in the light of the cost of floods, but also in terms of how such appropriations fit into a national budget geared to meet our defense requirements. In July of 1950, following the outbreak of hostilities in Korea, the President directed the Corps of Engineers to review its entire program in consideration of the international situation. Wherever possible, work was to be postponed or curtailed so that our resources as well as manpower could be fully used for the defense effort. Insofar as new construction was concerned, only the most urgently needed projects were to be considered.

As I explained to this committee last year, I felt that the criteria established by the President were not only proper but sound. At the same time, I pointed out my belief that we must retain enough flexibility to meet emergency situations when and as they arrive, that we should refrain from suspending projects already well under way which would involve considerable financial loss to the Government in contractual commitments; and I urge that we guard against arbitrary curtailment of projects that would contribute greatly to our defense effort.

### ACTION ON 1952 BUDGET

Having taken into consideration the criteria established by the President, the budget for fiscal 1952 recommended $5 million in construction funds for Tuttle Creek Reservoir because of its importance

to the national defense—because it has long been considered the most strategically important reservoir for the protection of the industrial area of the Kansas Citys and downstream through my State to the confluence of the Mississippi and Missouri Rivers.

Last year this committee and the Senate, in recognition of its importance, approved funds for starting construction of this project. As you know, of course, the funds were deleted in conference and protection for the Kansas Cities in both Kansas and Missouri was postponed still another year.

The people of the Kansas City area, who were the victims of so much human suffering and personal loss and property damage last year were understandably bitter. They justifiably believe that they deserve the serious efforts of Congress to protect their lives, homes, and property. They feel that the Congress is generous with words of sympathy and niggardly when it comes to any sort of positive action. And they feel despair and helplessness and hopelessness because they know perfectly well this is a situation they cannot meet by themselves. They must have help from Congress.

### INITIATION OF CONSTRUCTION

The Tuttle Creek Reservoir was authorized in 1938. Now, 14 years later, construction has still not begun. Again in his budget message for fiscal 1953 the President pointed out that only a limited number of new construction starts were recommended and that they were restricted to the ones most urgently needed. The Tuttle Creek project was included in this small group of essential projects, and the budget recommended $15,500,000 for beginning construction.

At the same time the President referred to the fact that in January he created by Executive order a Missouri Basin Survey Commission:

> to review the many different kinds of problems that exist in the large area of the basin and to advise the country as to the best way to proceed to achieve an over-all, orderly, businesslike development of the resources of the basin resulting in the greatest benefits for all the people of the basin and the Nation.

The House Appropriations Committee in denying funds for Tuttle Creek stated, among other reasons, its belief that no new projects should be started in the Missouri Basin until such time as the Commission has made its recommendations. Mr. Chairman, inasmuch as I was responsible for the original resolution to establish a Missouri Basin Survey Commission and in my capacity of Vice Chairman of the Commission, which I deem not only an honor and a privilege but a great opportunity for service as well, I am impelled to comment on this action by the House.

### INTEGRATED PROGRAM SUPPORTED

I have long believed that the water problems of the Missouri Valley can be met only through an integrated and coordinated program which takes into consideration all the aspects of water resources control and utilization. I have stated repeatedly that a piecemeal approach, in my opinion, cannot do the job and that we must evolve an over-all plan for the valley which includes, along with flood control, the other important aspects of reclamation, soil conservation, power, irrigation, pollu-

tion, and so forth. I have been deeply disturbed by the fact that any real and effective solution to the water problems of the Missouri Basin has been delayed not only by jurisdictional disputes and sectional biases, but also by violent controversies existing among the exponents of the various plans and methods of water utilization and control.

MISSOURI BASIN SURVEY COMMISSION

It was because of these very differences that I first proposed the establishment of the Missouri Basin Survey Commission. It was because I felt that such an independent commission going into the valley and holding public hearings throughout the valley and listening and talking with the people who live and work in the valley would be in a better position to come forward with a workable plan on which there could be a substantial measure of agreement.

IMPORTANCE OF PROJECT

Mr. Chairman, it was never my intention when I originally proposed the establishment of this Commission, and I am sure it was never the President's intention when he created the Commission by Executive order, that necessary work in the valley should be impeded or curtailed until the Commission makes its report which, under the terms of the order, I may say, is to be in February of 1953. The Commission is now engaged in holding hearings throughout the basin and will spend several months in continuing its study and in preparing the report which will be submitted. In the meantime the important projects in the basin must go forward.

The people in Kansas City and in the Kaw Valley feel that postponing action until the Commission reports—in effect, postponing action until the budget is being considered next year—would be to invite destruction from the terrible forces of nature which refuse to adhere to a man-made timetable.

CAUSE OF 1952 FLOOD

The flood which raged in the Missouri Basin this year came from a different direction and resulted largely from melting snow in the upper Missouri. As General Pick told us at the time, it was the result of a Chinook wind, as he called it, acting upon the snow in the upper basin. The various dams and reservoirs in the upper Missouri are, of course, under construction, but work had not proceeded far enough to make them serviceable in this late disaster. Nevetheless, I think there is no question that the Fort Beck Dam in Montana, which is completed and in operation, and which has a capacity of 19,400,000 acre-feet, did control the water in this latest flood as far down as the mouth of the Yellowstone River—water which otherwise would have poured on down the Missouri River in even greater quantities.

HOUSE CUTS OFF FLOOD-CONTROL PROJECTS

Nevertheless, in the face of the latest disaster, the House has denied or curtailed funds for upstream holding reservoirs already under

construction. No funds whatsoever were provided for the Gavins Point Reservoir, although the budget request was for $13 million. On the Oahe Reservoir, for which the budget request was $3,500,000, the House allowed only $700,000. On Fort Randall, where closure is expected to be made in July, the House cut the amount from the $37,500,000 requested by the budget to $30,000,000. Similarly on Garrison Reservoir the appropriation was cut from the $34,000,000 requested to $30,000,000.

Mr. Chairman, it is elementary knowledge that a reservoir offers no protection insofar as flood control is concerned until it is in operation. Certainly the two terrible and destructive floods in the Missouri basin within the last year should teach us the lesson that postponing the completion of these projects—not allowing work on them to proceed just as rapidly as possible from an engineering standpoint—is neither economically sound nor justifiable.

### EDITORIAL OF KANSAS CITY TIMES

The Kansas City Times, commenting editorially on the latest disaster, had this to say, in part:

> The Congress of the United States has whittled down the appropriations that could have delivered flood control in time. * * * It simply delayed the construction time on projects that it was already committed to build. And in the time lost by delays the flood came. Now the price of ruin is far greater than the money that could have delivered protection in time. * * * The people of the American heartland watch the spectacle of preventable floods and wait hopelessly for the next one to strike. They turn to the Government of the United States and find that officially floods don't exist.

Mr. Chairman, I do not profess to expertness as an engineer, nor do I feel that I am in any position to dissect the cost of these projects and attempt to analyze them dollar by dollar. I know of no real alternative except to depend upon the professional advice of the Army engineers that the projects which they recommend and which are approved and recommended by the Budget Bureau are sound and proper and important from both the engineering and fiscal standpoints. I hope that when the work of the Missouri Basin Survey Commission is completed we will have a better basis for determination on both of these scores. In the meantime I feel that the work should go forward in order to prevent serious economic loss on our present huge investment.

### RESTORATION OF FUNDS REQUESTED

Mr. Chairman, I earnestly hope and trust that this committee will display again the same real understanding of the terrible problems which confront us in the basin for which all of our people have been so grateful in the past and that you will restore the funds to initiate construction on Tuttle Creek as well as the full appropriations requested for the reservoirs on the upper Missouri.

I thank you, Mr. Chairman.

Chairman McKellar. Are there any questions, gentlemen? If not, we are very much obliged to you.

Senator Schoeppel. Mr. Chairman, I would like to call as the next witness Mr. John Riddle of Marion, Kans., who is president of the Cottonwood Valley Flood Control Association.

Senator STENNIS. Senator Hennings, that was a mighty good statement.

Chairman MCKELLAR. Will you proceed, Mr. Riddle?

## STATEMENT OF JOHN RIDDLE, MARION, KANS., PRESIDENT, COTTONWOOD VALLEY FLOOD CONTROL ASSOCIATION

STRAWN DAM, KANS.

Mr. RIDDLE. My name is John Riddle, of Marion, Kans.

While we firmly believe that dams on the upper headwaters such as proposed and authorized for Marion are absolutely essential for adequate flood control, we also realize that there are more important vital spots that must be served first. We therefore hope that you will restore the funds for the Strawn Dam on the Neosho and also all other authorized projects now under consideration in Kansas and that in the next session you will grant us the planning money at Marion for the protection of our people which we so desperately need. Thank you.

Chairman MCKELLAR. Are there any questions? If not, we are very much obliged to you.

Senator SCHOEPPEL. Thank you, Mr. Riddle.

Now, Mr. Chairman and members of the committee: We have two Members of the House from our State who desire to be heard as early as possible. In order to expedite their program, I would like to have Congressman Scrivner appear at this time to be followed by Congressman Cole, if there is no objection on the part of the committee.

Chairman MCKELLAR. Congressman Scrivner, will you come forward, sir?

## STATEMENT OF HON. ERRETT P. SCRIVNER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

STRAWN DAM, KANS.

Representative SCRIVNER. Senator Hennings, the gentleman from Missouri, stole most of my thunder, but he did it in so much better way than I probably could speak, that I am glad he preceded me.

Without repeating any of the things he said, I am here on behalf of two projects. One is Strawn Dam concerning which Mr. Redmond spoke so well and gave you so many facts.

The Neosho River goes through Allen County which is part of the Second District of Kansas and affects the two towns of Humboldt and Iola.

The damage done last year was terrific. I was amazed when I went into some of these factories to find that the Little Neosho, as hard as it is to believe, at one time had as much water flow as the flood on the Kaw, which is almost unbelievable.

The damage done and the need for this reservoir is undisputed. Last year this commitee did insert money for planning for Strawn Dam, and it was retained in the conference report partly due to some efforts on my part, I believe, and I feel quite sure that if additional money is included this year we will have the same success.

TUTTLE CREEK DAM, KANS.

I am also appearing on behalf of the funds for Tuttle Creek, about which you have heard much and about which before this session is over you will hear much more.

It so happens that when the full Committee on Appropriations of the House, of which I am a member, met, I tried as best I could to add to the committee report the item of $10,500,000 for Tuttle Creek Dam. The recommendation had been $15,500,000, which included $10,500,000 this year, in addition to the 5 million recommended last year.

That effort, I am sorry to say, failed.

Having failed in that and recognizing the position taken by the majority of the Civil Functions Committee and knowing the temper of the House at that time, I was quite certain that there could be no amendment carried in the House which would actually add any funds for Tuttle Creek Reservoir.

Realizing that fact, I offered an amendment which would have simply earmarked $5,500,000 of the $209 million, allotted to the Corps of Engineers, and have just that sum earmarked for Tuttle Creek, believing, as I did, that it would be quite possible for the engineers, if some of the other projects met some delay, to find that small sum to start on Tuttle Creek Reservoir.

That effort, too, met with failure, I am sorry to say. So that now the residents of the Kaw Valley, and particularly those of us who are down at the lower end toward the mouth—my home town of Kansas City, Kans.—have only one place to come for relief, the relief which we so direly need, and that is to the Senate of the United States.

I sincerely trust, Mr. Chairman, that in this instance the Senate will, as the founding fathers thought it should, review the actions of the House of Representatives and correct any gross errors or excesses which the House of Representatives might have committed, this being one of the times when I feel that they were wrong.

If this body, this committee, does recommend the funds for Tuttle Creek and if then the Senate as a whole concurs in that action, I can assure this committee that I will do whatever I can to see that the wisdom and judgment of the Senate is upheld.

Chairman McKellar. Thank you, sir.

Are there any questions, gentlemen?

If not, we are very much obliged to you.

Senator Schoeppel. Thank you, Congressman Scrivner.

I would like next to call Congressman Cole, please.

## STATEMENT OF HON. ALBERT M. COLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

TUTTLE CREEK DAM, KANS.

Representative Cole. Thank you, Mr. Chairman.

Mr. Chairman, I am Congressman Cole, of the First District of Kansas, in which is located the project known as Tuttle Creek. In my area is raging perhaps the greatest controversy concerning the building of flood-control projects that has occurred in any part of the country. That is my understanding.

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Chairman McKellar. I heard something about that last year.

Representative Cole. I have said publicly that I am not an expert on flood control, but I am beginning to be an expert on flood-control disagreement.

Mr. Chairman, since I have been in Congress, I have been studying this problem of flood control, and I have been of the opinion and am still of the opinion that a comprehensive approach to flood control is the proper method.

I have always felt that we must begin at the beginning where the water falls on the land and do a job of soil conservation and watershed control. I have held to that theory very, very consistently and vigorously.

### AUTHORIZATION

Tuttle Creek Dam was authorized in 1938. It was authorized without any attempt to approach the problem on the basis of what I believe the proper method—the comprehensive program.

It appears to me that, if we do not appropriate and do not construct Tuttle Creek, however, the First District of Kansas and the Kaw Basin will not have any flood-control project.

As I view the future, the jurisdictional disputes, the agency approach to the problem will continue in a manner not conducive to a comprehensive plan. It would appear to me, therefore, that this project, now being ready and now authorized, should be built.

I have stated that I felt that a continued study should be made, that an engineering study should be made of the impact of the watershed soil-conservation practices upon the size and need of any dam or any reservoir, and that should be done in connection with Tuttle Creek.

Frankly, I do not know whether it will ever be done. I see nothing in the immediate future to indicate that it will.

### FLOOD LOSSES

Now, the people who have suffered these terrible losses, the farmers who have suffered these terrible losses, the businessmen and the home owners in this valley and in the other valleys are entitled to know that something is to be done to control these destructive forces.

### CONSTRUCTION START URGED

That being true, Mr. Chairman, it has been my position that we must now immediately start the construction of this one project which is ready.

Therefore, I asked the House committee and I asked the House of Representatives to vote for funds for the construction of Tuttle Creek Reservoir, and I do now.

I hope that this committee will put it back into the appropriation bill.

Chairman McKellar. May I suggest that I believe that the day before this catastrophe at Kansas City occurred, or the same day——

Representative Cole. Probably the very day.

Chairman McKellar. No; this was the day before or 2 days before—and I have forgotten which—General Pick and General Chorpening, his assistant, were here, General Pick being the Chief of Engineers. They testified very vigorously in behalf of an appropriation for the building of this particular dam. They stated then that they believed it was the key to the whole situation.

Their strong testimony together with the strong testimony of others from that area—I think both Senators testified—convinced this committee that the appropriation ought to be made, and I am still convinced it should. You do not have to talk to me, but you may have to talk to these other gentlemen here.

However, I think they join me. I do not think there is any opposition in this committee.

Senator Ellender. Senator McKellar, you remember the part I played in this. I was 100 percent for it then, and am still.

The only thing is that we have a lot of Congressmen come in here and ask us to do these things in the Senate, but they somehow fail to carry their part of it out.

Representative Cole. We are well aware of that.

Senator Ellender. I hope that, if we exercise some more good judgment in this session, you folks will be able to get enough votes there to sustain the Senate.

DIKES AND LEVEES, NORTH TOPEKA, KANS.

Representative Cole. May I add one other comment with respect to a small project with reference to North Topeka, Kans.?

There is an item included in the budget of $500,000 for construction of additional dikes and levees in North Topeka. That item was eliminated by the House on the same theory; to wit, that no new construction would be permitted.

Now, it would seem to me that with North Topeka having suffered this terrible loss, being consistent is not being wise in that particular situation.

I must admit that the House committee did not authorize the appropriation of any new construction. They were consistent in that. But this is a critical situation there in North Topeka. Those people have done a marvelous job of rebuilding. The merchants up and down the streets, the homeowners in that part of the town have done a wonderful job of rebuilding, and for Congress to say that we are going to be consistent, not the Senate, but our own body, to say that we are going to be consistent, and not wise, seems to me not to be the right thing, nor the proper thing to do.

So I hope you will consider that in connection with these other matters which have been suggested.

Thank you very much.

Chairman McKellar. Are there any questions, gentlemen?

If not, we thank you, and we are very much obliged to you.

Senator Schoeppel. Thank you, Congressman Cole, and we do appreciate your taking the time to come over.

Now, gentlemen, I want to switch and call a number of witnesses on what is known as the Verdigris River project.

I want to first call Mr. Glenn Beal, of Fredonia, Kans., vice president of the Verdigris Valley Food Control Association.

Mr. Beal, please.

## STATEMENT OF GLENN H. BEAL, FREDONIA, KANS., VICE PRESIDENT OF THE VERDIGRIS VALLEY FLOOD CONTROL ASSOCIATION

### VERDIGRIS RIVER BASIN FLOOD CONTROL PROJECT

#### TORONTO DAM AND RESERVOIR, KANSAS

Mr. BEAL. Mr. Chairman and members of the committee, my name is Glenn H. Beal, of Fredonia, Kans., where I have been in the banking business for over 23 years. Not only am I vice president of the Verdigris Valley Flood Control Association but I represent the Governor of Kansas on the Kansas-Oklahoma-Arkansas Interstate Flood Control Committee.

I am here to testify on behalf of the Toronto Dam, a reservoir on the Verdigris River in Kansas, which project is the key to our flood problem in Kansas and Oklahoma.

I would first like to express my appreciation for the opportunity to appear before you and request an appropriation of $3,000,000 to begin construction in the fiscal year of 1953 of the Toronto Dam and Reservoir, which is an integral unit of the authorized Verdigris River Basin flood-control project in Kansas. This project was authorized for flood-control and conservation purposes by section 4 of Public Law 228, Seventy-seventh Congress (Flood Control Act of 1941), and contemplated the construction of four dams and reservoirs. The Fall River Dam and Reservoir was completed in 1949 on Fall River, which is a tributary of the Verdigris River.

The Verdigris River flows through one of the most fertile and productive valleys in the country where wheat, corn, soybeans, alfalfa, and other crops are grown. It has its confluence with the Arkansas River near Tulsa, Okla. The authorized Toronto Dam is to be located in Woodson County in southeastern Kansas, 150 miles southwest of Kansas City, 90 miles east of Wichita, Kans., and about 75 miles north of the Kansas-Oklahoma line.

#### FLOOD PROBLEM

The flood problem on this river is an old one, as it has flooded 53 times in 45 years. However, 11 years ago when this project was authorized the people were inspired with a hope that the dam would be constructed and the flood problem would be solved. In 1943 the flood damage on this river amounted to $4,850,000, and in 1948 the damage was $2,910,000, and, as a result of the June-July 1951 flood, damage and loss totaled $6,406,000. This was the most devastating and destructive of all floods on the Verdigris River in recorded history. About 1200 individuals were forced from their homes, and approximately 2,200 persons regularly employed in the area flooded were unable to perform their regular work.

In addition to the tangible losses which can be evaluated in monetary terms, there were many intangible flood losses in the area not susceptible to evaluation by invoice methods, such as five deaths by drowning in two separate mishaps near Toronto, Kans.; motor and rail traffic was interrupted, causing delays in shipments of food products, livestock and other commodities, wherein the time element

was of vital importance; human suffering and inconvenience resulted during the evacuation and reoccupation of the flooded area; and stagnant pools and very unsanitary conditions were created by the flood. Farmers engaged in cattle feeding, a major industry in the region, suffered losses due to the necessity of either buying feed or disposing of cattle before they were ready for market as a result of losses to grain and hay crops.

Soil erosion, siltation and weed infestation are additional factors for which losses have not been evaluated. Our land is one of the greatest and important resources—it will not renew itself. When land is expended it is lost forever.

The Verdigris River Valley in Kansas and Oklahoma is part of the food basket of our country. The production and distribution of agricultural products from this region is certainly vital to our defense.

### EFFECTIVENESS OF FALL RIVER DAM

The operation of the Fall River Dam located on Fall River which confluences the Verdigris just south of Neodesha, Kans., proved during the June–July 1951 flood beyond any doubt in the minds of the people of this area, that the building of flood control dams is an effective weapon that can be used to control these devastating and menacing recurring floods. When the Verdigris overflowed its banks and stretched out over miles and miles of rich bottom valley land, the engineers closed the gates on the Fall River Dam and thereby saved the abundant crop between the dam and the point of its confluence with the Verdigris River. This permitted the flood waters of the Verdigris to run off much faster than it would have been able to if the waters from Fall River had been permitted to flow on without control.

The United States Engineers have estimated that the Fall River Reservoir built at a cost of approximately $10,000,000 prevented flood damages during the June-July 1951 flood amounting to $1,840,000 in the entire Verdigris River Valley in Kansas and Oklahoma. Had the Toronto Dam been completed, the operation of both projects would have prevented flood damages amounting to $2,960,000 in the valley during this one flood, and additional flood losses would have been prevented by these two flood-control dams along the main stem of the Arkansas River in the approximate amount of $800,000.

The people of the Verdigris Valley, including the cities of Coyville, Fredonia, Benedict, Altoona, Neodesha, Independence, and Coffeyville all in Kansas have observed the effective results of the operation of the Fall River Dam and live with a hope in their hearts that funds will be appropriated to begin construction of Toronto.

### STATEMENT OF SENATOR CHAVEZ

On July 30, 1951, Senator Dennis Chavez, chairman of a senatorial investigation committee, after inspecting the flooded areas, made the following statement before the United States Senate as reported in Congressional Record—Senate (vol. 97, No. 139, p. 9344):

> It was in this area, too, that we saw a heartening sight in this depressing panorama. On one of the streams Fall River, a flood-control dam had been finished not long ago. It was the first of a series of dams planned for a major

tributary of the Arkansas River. Upstream from this dam, where the flood waters came down unrestrained, we could see the unmistakable signs—dying crops, mud, silt, and washed out bridges and roads. But below the dam, and stream had been kept within its banks, the fields were green and there was no sign that one of the worst rainstorms of record had passed over just a few days before.

The following organizations all of which are familiar with the flood problem of the Verdigris River have endorsed and passed resolutions urging that funds be appropriated to start construction on this very important reservoir in the fiscal year 1953:

City Commission of Fredonia, Kans.; City Commission of Neodesha, Kans.; City Commission of Independence, Kans.; City Commission of Coffeyville, Kans.; Kansas City Chamber of Commerce; Chamber of Commerce of Fredonia, Kans.; Chamber of Commerce of Neodesha, Kans.; Chamber of Commerce of Independence, Kans.; Chamber of Commerce of Coffeyville, Kans.; Arkansas-Kansas-Oklahoma Inter-State Flood Control Committee, Mississippi Valley Association; Chamber of Commerce of Kansas City, Mo.; Chamber of Commerce of Kansas City, Kans.; Chamber of Commerce of North Kansas City; Greater Kansas City Council of the Mississippi Valley Association; Central Industrial District Association, Kansas City; Flood Protection Planning Committee for Greater Kansas City; Armourdale Activities Association, Kansas City, Kans.; Missouri-Arkansas Basins Flood Control Association; Chamber of Commerce of Lawrence, Kans.; Arkansas-Kansas-Oklahoma Inter-State Flood Control Committee.

PUBLIC OPINION

We have almost a united public opinion in our area favoring this project. Strange as it may seem many farmers now residing in the area which will be inundated by the proposed Toronto Dam, are anxious for this appropriation.

This is explained by reason of the state of confusion that now exists. Because with the engineers plans complete, the county and State have ceased to maintain roads and bridges in this area. These farmers are now in such a position that they cannot sell and relocate, because no buyer desires to be placed in this confused and uncertain situation.

On July 25, 1951 (10 months ago, following the great flood) the budget office asked for a supplementary increase in appropriation to H. R. 4368 in which $3,000,000 was asked for the first year of construction of the Toronto Reservoir. The Senate last year placed $3,000,000 in the budget, to begin construction of this $15,000,000 project, but the item was taken out in the conference committee. Six months later the budget office made no request for funds to start Toronto in fiscal 1953, which 6 months before was deemed of urgent importance.

Yet the farms and cities on the Verdigris which were so deeply flooded, still have the hazard and their damage from future floods is as present as ever. The following cities in Kansas are all in the Verdigris flood plain; Neodesha, Independence, and Coffeyville. The economy of this entire valley is dependent on construction of the Toronto Dam. Many industries in these cities are contributing to our defense effort in the manufacture of high octane gasoline, and parts for our B–47 airplanes. In the June-July 1951 flood 207,300 acres of land were inundated on the Verdigris River which included 112,000 acres of rich cultivated bottom land.

STATEMENTS OF ENGINEERS

On February 1, 1949, Lt. Gen. R. A. Wheeler, the then Chief of Engineers stated:

It is considered that the next logical step in the development of the Verdigris River Basin would be the construction of the Toronto Reservoir project.

On January 24, 1950, Lewis A. Pick, major general, Chief of Engineers stated:

The next logical step in the development of the four-reservoir plan for the Verdigris Basin is the construction of the Toronto Reservoir. Operation of the Toronto project in conjunction with units presently under construction will provide urgently needed flood protection for overflow areas of 192,000 acres in the Verdigris River Basin and 980,000 acres in the Arkansas River Basin. The Toronto project will also provide additional stream flow regulation in the Verdigris River Valley for abatement of pollution and water supply for municipalities located downstream therefrom.

And in July, 1951 General Pick stated:

I think the most effective project you could build down in here [pointing to southeastern Kansas on the map] would be the Toronto Dam which is located here.

There has been no Arkansas Survey Commission appointed, such as the one now on the Missouri River. There can be no logic, in my opinion, to delay construction longer—which would mean millions of dollars of loss, to say nothing of human suffering and loss of life.

AMOUNT APPROPRIATED

Gentlemen we beg of you to consider our problem and it is our fervent hope that you will appropriate the necessary funds that prompt construction may begin in the public interest. The Congress has already appropriated $360,000 for planning money and the engineers advise that plans are completed and that a contract could be let at once.

I would like to file for the record affidavits of Mr. Cliff Howard and Mr. Lee Moon.

Chairman McKellar. Without objection, it is so ordered.

Mr. Beal. Thank you.

(The affidavits referred to follow:)

AFFIDAVIT

STATE OF KANSAS,
*Wilson County, ss:*

My name is Cliff Howard. I am 58 years of age and I am a resident of Toronto, Kans., living 3 miles south and 1½ miles east of Toronto, Kans. I own 486 acres of land at this location and have been a farmer, farming said land for 7 years.

My land is within the area proposed to be inundated by the proposed Toronto Dam. Subsequent to the planning for this dam, all activities with reference to public support of ordinary necessities with respect to the proposed inundated area have ceased and this is particularly evidenced by the failure of Woodson County and/or the State of Kansas to maintain the roads in passable condition for ordinary traffic and to the extent that at the present time the mail-carrier carrying mail through the neighborhood which I occupy has ceased the delivery of rural mail because of the impassable condition of said highway which has been neglected and the upkeep refused because of the authorized use of said land for said dam purposes.

This uncertainty as to whether who will be occupying this land 6 months or 6 years makes it impossible to plan with any certainty for future activities with respect to my own operations or my family and results in an unsettled state of mind which likewise makes it impossible to determine a proper course to take with reference to the redemption and/or sale of my land for the reason that no prospective buyer would under the circumstances look into a situation about which there is the same confusion and uncertainty as is now experienced by this affiant and those similarly situated and this condition is illustrated by the fact that since the authorization of the dam I have had my holdings listed and no agent has been able to procure an interested purchaser by reason of the facts herein recited.

Authorization for the construction of the Toronto Dam would relieve all of the complaints stated herein.

(Signed) CLIFF HOWARD.

Subscribed and sworn to before me, the undersigned, a notary public in and for Wilson County, Kans., this 30th day of April 1952.

(SEAL) (Signed) NORMA CLARK,
*Notary Public.*

My commission expires October 27, 1952.

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AFFIDAVIT

STATE OF KANSAS,
*Wilson County, ss:*

Lee Moon, of lawful age, being first duly sworn upon oath, states:

"I am 57 years of age, and I am a resident of rural free delivery Toronto, Kans., living 1 mile west of Toronto, Kans., and have lived there for 17 years. At this location I own and operate 450 acres of land.

"I have read the affidavit made by Cliff Howard to which this affidavit is attached, and I know from my own personal knowledge that the things Mr. Howard has stated to be true and correct, and further state that, while I live but a mile west of Toronto, Kans., and for the reason recited in the affidavit of Mr. Howard, the governmental units responsible for road or highway upkeep have neglected and refused to maintain the road leading from my location to Toronto, Kans., and in this particular: The flood in July 1951 took out the bridge on said road and no movement has been made by any responsible authority and none is contemplated to replace said bridge to make the road passable. As a consequence, it is necessary for those who travel from the location of my land to Toronto, Kans., to go around another route, making it necessary to travel 7 miles to get to Toronto when across the straight thoroughfare it would be and is just 1 mile. That this condition applies to all of those in the area or those who would travel through that point en route to Toronto and those same people are similarly situated to myself.

"Authorization for the construction of the Toronto Dam would relieve all of the complaints stated herein.

(Signed) LEE MOON.

Subscribed and sworn to before me, the undersigned, this 29th day of April 1952.

[SEAL] NORMA CLARK, *Notary Public.*

My commission expires October 27, 1952.

Senator SCHOEPPEL. I want to next call Mr. Emmett Wilson, who is the mayor of Independence, Kans.

Chairman MCKELLAR. Mr. Wilson, come around, please.

## STATEMENT OF EMMETT WILSON, MAYOR, INDEPENDENCE, KANS.

TORONTO DAM AND RESERVOIR, KANS.

Mr. Chairman and members of the committee, I am appearing as mayor of the city of Independence, Kans., and also on behalf of the Verdigris Valley Flood Control Association. I am associated with

Union Gas System, Inc., and Elk Valley Alfalfa Mills of that area.

The people of my city, my county, and the entire area covered by the Verdigris River Basin are desperately in need of development of the Verdigris Fiver Basin flood-control project in Kansas.

The project is a part of the general comprehensive plan for flood control in the Arkansas River Basin which was approved by Congress in the Food Control Act of June 27, 1939. The Verdigris River plan, which contemplates the construction of the Toronto Dam, was approved in Congress August 18, 1941.

COMPLETION OF FIRST DAM

The first dam of this project, known as the Fall River Dam and Reservoir, was completed in the summer of 1949. This dam has conclusively demonstrated that the plan will work. There has been no flood on the Fall River below this dam, and until June and July of 1951 there was no extensive flood on the Verdigris due to the control of floodwater available through the one dam completed. The Army engineers have estimated that, had the Fall River Dam not been in operation, the 1951 flood would have been 4 feet higher on the lower Verdigris River in Kansas, and another 1-foot raise in the river would have flooded the city water-pumping plant at Independence, Kans., during that flood.

1951 FLOOD DAMAGE

The 1951 flood which devastated our area of the State far exceeds the greatest in the known history of the river valley. The losses resulting are difficult to comprehend. The flood covered 116 square miles. Many more thousands of acres would have been flooded had the Fall River Dam and Reservoir not been in operation. This loss in the Verdigris Valley has been a constantly recurring one, with 53 floods in 45 years.

Thousands of acres each year are needlessly wasted by flooding which can be controlled. Industrial areas receive damage year after year. The road system is damaged and traffic halted for days at a time.

The Verdigris plan was authorized in 1941. The people of the valley believed that an orderly development of the plan would come; yet 11 years have elapsed and only the Fall River Dam has been completed. Those living in the reservoir area have been in a constant state of suspense, and orderly progress has been halted to farm improvements. The roads system in the reservoir area is only temporarily repaired. The land is not easily sold because of this constant air of uncertainty. Those living below the dam site have lived in the hope that relief would come, and yet, after 11 years, there is no action.

Thus far in this statement I have dealt with the devastation caused in our area in general and without reference to particular types of flood loss. I now wish to comment on some types of loss with which I am more especially familiar, either due to my business activities or due to my general knowledge of the area.

Union Gas System, Inc., is a public-utility company supplying natural gas to most of the residents and most of the industries located

in the area. Its pipelines and producing wells are susceptible to flood damage. During the 1951 flood its emergency radio cars were pressed into service to keep communities, otherwise entirely isolated from public contact, in a position where their dire peril could be broadcast. The community of which I am mayor is headquarters of the Sinclair Pipe Line Co., the largest oil pipeline system in the world. Within the past few months they have built another 24-inch oil pipeline through the Verdigris Valley area.

ALFALFA PRODUCTION

I am also associated with the Elk Valley Alfalfa Mills, who dehydrate alfalfa, one of the leading crops produced by farmers in the Verdigris Valley. Other dehydrating companies are similarly engaged. We saw the flood of July 1951 wipe out all the stands of alfalfa that was planted for the dehydrators' source of supply and left rotting in the floodwaters. Warehouses filled with thousands of bags of alfalfa meal, destined for livestock feed the world over, were left a soggy and utterly worthless remnant of the flood.

Can we long expect farmers to plant alfalfa and other farm crops in this area, or expect business to erect industries, faced as they are with the constant threat of such disasters? The economic burden under which we struggle and the economic losses we sustain through delay in correcting this situation are not exclusively ours but affect the entire Nation, as this section of the United States is referred to as the bread basket of America.

Last week I drove many miles through this beautiful valley. The hundreds of acres of alfalfa is well over knee high, and the men are busily engaged in cutting and delivering the alfalfa to their dehydrating plants. The production is over a ton to the acre of dehydrated meal. The wheatfields will be headed in a short time, and the combines will start to roll about the 15th of June, with the prospect of a bumper wheat crop. The corn is up, and the farmers are cultivating their fields in great anticipation of a good yield this fall. Hundreds of head of white-faced cattle are grazing on the green pastures, and the countryside has an air of great hope and anticipation for a good year.

All this can change overnight the same as it did in July 1951 and has done year after year in the past. This entire beautiful Verdigris Valley can become a picture of devastation and a soggy, stinking mess—livestock drowned, homes washed away, and the savings of a lifetime lost, not to mention the loss of human lives that always occur in a disastrous flood—while our people are filled with hope and encouragement that Congress will at last wake up to their dire peril.

TORONTO DAM NEEDED

We pray you give us the necessary appropriation to start the construction of the Toronto Dam, which is to be located near the town of that name and approximately 50 miles north of Independence. The engineering plans are completed, and contracts looking to its construction can be let immediately.

The Army engineers advise us, and we believe their advice can be relied upon, because of the demonstrated operation of the Fall River Dam, that the construction of this additional dam will control all but

the severest floods. It will mean a saving of lives and property of inestimable value.

It is our sincere hope that this statement of facts relative to the great need in the heart of our Nation will be favorably received and that the appropriation of $3 million to start the construction of the Toronto Dam will be made available.

Senator SCHOEPPEL. Is Mr. Boone here?

Mr. BOONE. Yes, sir.

Senator SCHOEPPEL. Mr. Boone is interested in one of these projects, and I would like at this time to have him make his presentation before the committee.

Chairman MCKELLAR. Come around, Mr. Boone.

I want to say to the two Senators and the others at this point that I have to go up to vote in the Senate, but I will be back in a few moments.

Mr. Ellender will take my place.

Senator ELLENDER. Will you proceed, sir.

## STATEMENT OF W. I. BOONE, EUREKA, KANS.

### VERDIGRIS RIVER DAM PROJECTS

Mr. BOONE. Mr. Chairman and members of the committee, I am W. I. Boone, a farmer living near Eureka, Kans. I am here primarily representing the Kansas Watershed Association and primarily to comment on the Tuttle Creek proposition.

However, this association is interested in all of our flood-control projects in Kansas.

I live in Greenwood County, Kans., the area where the Toronto Reservoir will be located. The dam will be across the line in Woodson County. I feel that I am very familiar with that area.

I would like to point out to you, gentlemen, that in the eastern third of Kansas we have what is known as the bluestem pasture area, a strip about 100 miles wide, a wonderful place for the application of a retention dam and watershed treatment.

We have at this time the State board of agriculture making a pilot study on a tributary of the Verdigris River in Greenwood County, which gives very promising results. The results have not been released as yet.

### WATER RESOURCES

It is generally known that Kansas is subject to periodic drought as well as floods; and the economic development of the State agriculturally, industrially, and socially is frequently handicapped by inadequate water resources.

Likewise, in periods of excessive rainfall the damage from uncontrolled water runoff is shared from the smallest upland ravine to the valleys of major streams. It is estimated by competent authorities that 70 percent of more of the annual recurring losses from floods occur before the water reaches the main valleys.

Since Kansas streams are not considered suitable for the development of hydroelectric power, river navigation within the State is not proposed and that beyond our boundaries is of questionable value to correcting the freight differentials of the area, and the economic ex-

tension of irrigation is limited, then the problem is one primarily of water management for the greatest use of our water and soil resources for maximum economic and social benefits of the State.

INADEQUACY OF PICK-SLOAN PLAN

The authorized and proposed large reservoirs under the Pick-Sloan plan for which appropriations are sought will not give these results, since the basic needs of the area were not properly recognized in the planning. The benefits are limited and the cost-benefit ratios are narrow. The approach is neither comprehensive nor coordinated in its planning or execution by the different agencies involved.

The people of Kansas, awakened to the need, are attempting to work together to bring a realistic and economic solution to the problem.

In that, the assistance and understanding of the members of this committee and all interested agencies are imperative and earnestly solicited.

PROPOSED FLOOD SOLUTION

To attain such a solution we feel the following principles should be applied:

1. Planning should be comprehensive and integrated.
2. Priority of construction should be given to projects with the highest ratio of benefit to cost.
3. The construction of some of the presently authorized projects without determining their value in a completely integrated program is wasteful and will delay the development of such.

Much of the eastern half of Kansas, the area subject to most frequent and severe flooding, is topographically suited to the use of retention dams to match in retarding capacity the larger reservoirs now planned, the uplands being largely grasslands.

It is in this area the Tuttle Creek, Strawn, and Toronto projects are located.

The Marais des Cygne also originates in this area.

Treatment of such lands by watershed methods has been demonstrated as sound and economical by the Washita Valley program and other small pilot projects throughout the central United States.

We are not opposed to large reservoirs as such, nor the provision of living water and flood protection for cities and downstream industrial areas. We consider them an essential part of any complete program.

We are seeking the means of extending the benefits of water management to all of the segments of our economy at the minimum cost, with the greatest amount of local cooperation and most complete integration of effort by the agencies involved.

MISSOURI RIVER BASIN REVIEW COMMITTEE

To that end we commend the appointment by the President of the Missouri River Basin Review Commission as a step in the proper evalution of all projects. We submit that appropriations be withheld for Tuttle Creek and Glen Elder, Toronto and Strawn Reservoirs until this commission has had an opportunity to make their review.

I wonder if I might just file with your committee some computations on the cost of the four reservoirs in the Verdigris area and also some

reflections of public sentiment indicated in the publication of the largest farm organization in Kansas. I would like to file three clippings from issues of the Kansas Farm Bureau News.

Chairman McKellar. That may be done, sir.

Mr. Boone. Thank you, sir.

(The material referred to follows:)

*Cost of 4 dams—Verdigris River Valley in Kansas*

| Project [1] | Estimated cost [2] | Square miles in watershed [3] | Cost for each square mile in watershed |
|---|---|---|---|
| Fall River (completed in 1949) | $10,762,500 | 573 | $18,782 |
| Toronto (in planning stage) | 15,550,000 | 750 | 20,733 |
| Neodesha | 15,210,000 | 410 | 37,097 |
| Elk City | 22,240,000 | 635 | 35,023 |
| Total | 63,762,500 | 2,368 | 26,926 |

[1] The 4 reservoirs are Corps of Engineers flood-control projects, all authorized in 1941.
[2] Costs are estimates made by the Corps of Engineers in December 1951.
[3] Drainage area data taken from a publication of the Corps of Engineers, "Work of Corps of Engineers in Kansas" published in July 1950.

The exorbitant amount of $27,000 for each square mile is being spent to catch part of the flood water, without any benefit whatever to the drainage area of 2,368 miles above the reservoirs.

FINAL COST OF FLOOD PROTECTION TO EXCEED $40,000 PER SQUARE MILE IF BIG RESERVOIRS ARE BUILT

If the four proposed reservoirs are built in the upper Verdigris Valley, at an average cost of $27,000 per mile to catch run-off water, and if a sound soil-conservation plan and flood-control plan is carried out on the watershed at an addition cost of $5,000 to $15,000 per square mile, then the total cost will amount to $30,000 to $50,000 for each mile in the drainage area.

The watershed is the key to any workable plan of main stream flood protection, because the watershed furnishes both the run-off water and the silt.

The usefulness of big reservoirs depends on holding the silt on the drainage area, and out of the reservoirs or streambeds above the reservoirs.

Downstream bank stabilization and levee structures cannot be maintained when silt from the watershed clogs the streambed, forcing the channel from side to side in the flood plain, and undercutting levees.

The upper Verdigris Valley is a hilly area—an ideal region to use a watershed plan to protect the soil and to provide flood protection and water storage for the entire valley, at a cost far less than the big-reservoir plan.

AMPLE WATER STORAGE SITES IN UPPER VERDIGRIS VALLEY

Floodwaters can be controlled on the watershed in the upper Verdigris Valley. Most of the area is a part of the Flint Hills region. This range of hills extends north and south through the State, reaching from Nebraska to Oklahoma. There are numerous ravines and canyons distributed thruout the region that are well suited to the storage and control of water.[1]

About two-thirds of the upper valley is in permanent pasture where reservoirs can be constructed on the less valuable land and where there will be the very least trouble from siltation.

One example of the storage sites available is the Eureka Lake on Bachelor Creek, which drains into the proposed Toronto Reservoir.

[1] Reference: Map, p. 1 of Grasses in Kansas, published by Kansas State Board of Agriculture. Quadrangle sheets of the area published by the U. S. Geological Survey in 1885.

*Eureka Lake*

| | | |
|---|---|---|
| Drainage area | square miles | 15 |
| Storage capacity | acre-feet | 3,690 |
| Storage per square mile | do | 240 |

*Proposed Toronto Dam*

| | | |
|---|---|---|
| Drainage area | square miles | 750 |
| Storage capacity | acre-feet | 160,000 |
| Storage per square mile | do | 213 |

A watershed plan for water management is economically sound. It will protect against soil losses and prevent flood damage. A watershed plan will increase agricultural profits as well as reduce flood damage.

A watershed plan provides for water for industrial and municipal use for the entire valley, instead of for a small portion at the lower end of the valley.

ONLY FRACTIONAL GAINS POSSIBLE WITH LARGE RESERVOIRS

When the flood-control problem of an entire valley is considered, only a small degree of protection can be obtained by a single large reservoir.

The area served by the Toronto Reservoir is 1,160 square miles, from the headwaters of the Verdigris River downstream to a point where another reservoir is required, which is the Neodesha Reservoir.

The area given full flood protection by the Toronto Dam is 15,000 acres. But the flood pool in the Toronto Reservoir inundates over 10,000 acres, so there is a net gain of less than 5,000 acres, or about 8 square miles.

The 8 square miles of protected area is less than 1 percent of the valley. Yet over $15,000,000 is proposed to be spent for 1 percent of a valley that suffers flood damage to the communities over the entire area.

The large reservoirs give additional protection to a limited acreage downstream but similar protection could be furnished by a complete watershed plan for flood-loss prevention, and improved water storage distributed throughout the valley.

(Prepared February 24, 1952, by the Eureka, Kans., Chamber of Commerce flood-control committee.)

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[The Kansas Farm Bureau News]

COST-BENEFIT RATIOS ON DAMS NEED RESTUDY

It appears to us that the Army engineers' proposal for 21 additional reservoirs in the Kansas River Basin is an obvious admission that the cost-benefit ratios previously given to the Perry, Tuttle Creek, and Milford Reservoirs, as well as other proposed reservoirs up stream, now should have a thorough restudy.

Last July General Pick declared that an expenditure of $300 million could have prevented the damage from the record-breaking 1951 flood. In other words, he said at that time that reservoirs proposed before July were capable not only of containing all floods of previous record, but also of containing the huge 1951 flood. The total benefits of containing all floods of record and the 100-year flood of 1951 were divided among the reservoirs which had been previously proposed.

Now, however, the engineers suddenly decide that 21 additional reservoirs are needed in the Kansas Basin to accomplish the same objective which previously was to be accomplished by Perry, Tuttle Creek, Milford, and the other upstream dams.

Obviously, the total benefits to be achieved are still substantially the same, but part of those total benefits now must be assigned to the 21 new proposals for reservoirs. The amount of benefits which can be attributed to Tuttle Creek, Perry, Milford and the others must be reduced. The old cost-benefit ratios are no longer valid. They must be reexamined.

In a recent public declaration, Congressman Clifford Hope, of Kansas, said that Congress should give more attention to controlling water runoff by holding rain where it falls instead of relying completely on impounding floodwaters in huge main-stream reservoirs. We believe that Congressman Hope can be assured that a solid majority of Kansas citizens and at least 90 percent of Kansas' farmers stand behind him in that position.

We recently listened to a talk on flood control by an engineer who had been with the Corps of Army Engineers for 17 years.

Among the more interesting statements he made was one in which he declared that under present methods of computing cost-benefit ratios, it was possible to spend as much as $1,000 an acre to protect land which would still be worth only $100 an acre after the flood-control project had been completed.

SOME EDITORS MISINTERPRET DAM POSITION

Repeatedly in recent weeks we have heard radio broadcasts and seen newspaper articles which tag Kansas Farm Bureau as being anti-big dam.

The very first sentence on the Farm Bureau resolution on this subject as adopted by the voting delegates at Wichita reads, "We are not opposed to big dams as such."

Farm Bureau does oppose complete reliance on big dams as proposed by the Army engineers as an adequate program of flood prevention. Almost all authorities including reputable engineers agree that 75 percent of all flood damage occurs above main stems. But in the past, hundreds of millions of dollars have been spent on huge dams which protect only property along the main stems below the dam sites. The amount which has been spent to protect property above dam sites where 75 percent of the damage occurs is almost negligible.

However, we do not wish the Farm Bureau position to be interpreted as transferring the responsibility for flood control from the Army engineers to the Department of Agriculture, to the Bureau of Reclamation, or any single agency. Although Farm Bureau policy on this single point has not been determined by the voting delegates, it would appear to this writer that the dangers of complete acceptance of the $8 billion Missouri Basin program of USDA are just as great as a full endorsement of the engineers' spending plans.

The Farm Bureau position is clear that it does not call a compromise between heads of competing Government agencies genuine integration. If the public fell into the trap of accepting all such compromises, it would be too easy for one agency to say to another, "We don't question your request for appropriations if you won't interfere with our requests. We'll both submit our proposals and assure anyone who asks that we are in complete agreement."

The Farm Bureau resolutions show clearly that we must have an over-all supervisory screening authority, disassociated from any single agency to assure that flood-control projects by individual agencies will fit into an integrated and balanced program. Perhaps no new authority or commission is necessary. Congress can and should exercise all the powers necessary in such a screening process. Congress should, however, have the technical assistance necessary to do a good screening job.

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[The Kansas Farm Bureau News]

ULTERIOR MOTIVES

We were mildly surprised recently to learn that Gen. Lewis Pick, of the Army engineers, is not always a conservative man. We had supposed that an engineer has an approach to his business comparable to that of a banker to his business. Bankers are always cited as examples of conservatism when they consider the handling of their bank's money, although we have known a few who sometimes were just a little loose with a few nickels in a rummy game. We had supposed that engineers were just as conservative when they sat down to a drafting board or handled complex blueprints involving billions of taxpayer money.

But General Pick disturbed that conception somewhat when he appeared before the Senate Flood Control Appropriations Committee July 19. He declared first of all that a paltry $300,000,000 would have saved a billion dollars of damage in the Kaw watershed. It may be a minor point, but General Pick apparently ignored the fact that his figure of $300,000,000 was based on Army engineer estimates, some of them several years old, and that Army engineers seldom have built a dam and reservoir at a figure which would begin to fit into the original estimate.

More alarming was General Pick's conclusion that Tuttle Creek Dam would have averted most of the disaster to Kansas City. There are not many engineers in central Kansas, but almost all of the residents of that area have completed sixth-grade arithmetic, and they do have eyes to watch running water. At Manhattan they saw the Kaw backing the Blue upward toward where General Pick says Tuttle Creek Dam should have been. And these central Kansas folks know that water was spilling over the banks of the Kaw at Kansas City within a few hours after flooding began from Tescott, Wakefield, and Blue Rapids, all the way to Topeka.

General Pick also told the Senate committee soil conservation is not an aid to flood control. We don't know what General Pick includes under the heading of flood control. Out here in Kansas, folks think of soil conservation as including contour planting, terraces, permanent grass, detention dams, and other practices. Now if General Pick will concede that such practices are a part of the conservation program (certainly, they are not Army engineer programs), there are some folks at New Cambria, just east of Salina, who would like to show him how their project controlled runoff of the heavy rains which fell July 9, 10, and 11. Reputagle farmers in Saline County will testify that the New Cambria project, featured some months ago in the Kansas Farmer, came through this most severe test with flying colors.

At New Cambria, a group of farmers organized to pool their ACP payements in the construction of terraces, detention dams, and other runoff controls. They treated one small watershed as a unit problem, instead of each farmer trying to handle the problem on his own farm without cooperation with neighbors on whose land his water might run or other neighbors from whose land water might run to his farm.

It has been noteworthy that newspapers featuring General Pick's testimony have not bothered to dig deeply for accurate facts. Whenever extravagant statements are made, whenever there is a noticeable lack of effort to investigate thoroughly and to secure accurate facts, it often can be assumed there are ulterior motives.

In this case, what motives would there be other than the single purpose of controlling floods. The Army engineers have two rather obvious ulterior motives. First, they must get money to build another big dam. Unless there is some big project to keep them busy, Congress might get the idea of curtailing their activities. And secondly, this flood offers an opportunity to stampede Congress into forgetting the 1950 report of the President's Water Policy Commission. That report called for a comprehensive water-resources program. The Army engineers would have been subject in the future to supervision by an over-all water-resources control. They would not have been allowed to go their own way, ignoring other agencies interested in land and water conservation. And the engineers simply don't want to be curbed.

Finally, at least one large city down the river has another reason for wanting Tuttle Creek Dam, other than the flood-control motive. This large city needs a flush bowl to flush out its sewage when the river runs low in the summer and early fall months. Tuttle Creek would provide such a flush bowl.

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### How Many Dams?

That there must be dams and reservoirs in any comprehensive flood-control plan for the Kaw Basin or the watersheds of the Marais des Cygnes, the Verdigris, the Neosho, and other Kansas rivers is recognized by the majority of persons who approach the problem calmly and objectively.

That the few giant dams recommended by the Pick-Sloan plan for the Kaw watershed would be totally inadequate for such a catastrophe as occurred in July 1951 has been thoroughly proved.

Down river, there were statements that "Manhattan has learned its lesson" and "Now they'll go along with the Pick-Sloan plan" as the worst disaster in the history of the river hit the city at the junction of the Kaw and Big Blue.

But Manhattan citizens were not stampeded. They had seen the terrific Kaw currents sweep down every inundated street in the city from south to north. They saw the Kaw back up the Big Blue, so that relatively little Blue water entered the Kaw channel during the height of the flood. It was obvious to Manhattan citizens that Tuttle Creek Dam and Reservoir would not have saved them from disaster.

The Manhattan City Commission passed a resolution urging a comprehensive flood-control program. Dams and reservoirs would be included in such a program. But there would be additional dikes. There is need for greater emphasis on keeping water where it falls. The Manhattan City Commission refused to give its endorsement to the Pick-Sloan plan as a final answer to the problem.

There would appear to be ample evidence that Tuttle Creek would have been of little help in preventing the disasters in Topeka, Lawrance and Kansas City. Flood waters in Topeka surged over the river banks on July 10, the same day that water spilled over the banks at Wamego. On July 11 the Kaw was spilling

over its banks at the west edge of Kansas City. It is noteworthy that Randolph on the Blue had its crest only 12 hours ahead of Kansas City. Water simply does not run that fast. Incidentally, the crest at Enterprise, on the Smoky Hill, occurred 12 hours after the crest at Kansas City.

This was a flood which struck over an area of tens of thousands of square miles almost simultaneously. It struck because of saturated soil and record-breaking rains over a period of 60 hours. Every little tributary, most of them ignored in the Pick-Sloan plan, contributed heavily to this flood.

A comprehensive flood plan certainly will include dams. But how many dams? Salina, supposedly protected by the giant Kanopolis Dam, had a flood which came within .63 of a foot of the all-time 1903 level. For complete protection, Salina needs dams on Dry Creek, on the Mulberry, and another on the Smoky.

Abilene needs dams on Mud Creek, on Turkey Creek, and on Holland Creek. There should be dams on Chapman Creek and on Lyons Creek for better protection in eastern Dickinson and western Geary County.

Topeka can assign to Mill Creek a large share of the responsibility for its flood. Have the Army engineers looked at Mill Creek? And has anyone at Kansas City, or the Army engineers, made a study of the part played by the Wakarusa in the Kansas City flood? And while they are looking at the Wakarusa, they had better look at Stonehouse and the dozens of other creeks entering the Kaw between Topeka and Kansas City.

Yes, we may need dams. But we need a lot more than General Pick or Mr. Sloan ever thought about. We may need a few big ones. But the case for hundreds of detention dams and other water-control projects on every farm and in every community is stronger than ever.

Incidentally, the folks who carry the ball for General Pick and Mr. Sloan in the public prints should be learning the difference between a farm pond and a detention dam.

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EXCERPTS FROM THE 1950 REPORT OF THE PRESIDENT'S WATER RESOURCES POLICY COMMISSION

In December of 1950, after more than a year of study, the President's Water Resources Policy Commission issued a three-volume report of more than 2,000 pages setting forth certain broad policies and objectives designed to bring clarity to the jumbled water resources picture resulting from bickering and outright feuding among a number of Federal agencies. The President's Water Resources Policy Commission was made up of seven distinguished citizens who heard almost endless testimony from everyone concerned in our water resources. They heard representatives of Government agencies, they heard representatives of private industry, private organizations of all kinds and scores of individuals qualified to give expert testimony. The report of the commission was accepted as being the most comprehensive over-all statement which has ever been made on our water resources problem. Following are a few excerpts from the summary of this committee's recommendations.

"Floods cannot be controlled by building higher and higher levees, or permanently by building dams, if other thing are neglected. The big streams are fed by small streams, and water control inevitably leads us back to the proper conservation of forests and agricultural land * * *.

"The farmer who holds the rain water by terracing his fields, the group of farmers who band together to form a soil conservation district, play an indispensable role in water management * * *.

"There is today no single, uniform Federal policy governing comprehensive development of water and land resources * * *.

"[We see] * * * The necessity of planning for a river basin as a whole instead of having a patchwork of plans by separate agencies for separate purposes * * *.

"Congress should direct the responsible Federal agencies to submit new proposals for water resources development to Congress only in the form of basin programs which deal with entire basins as units and which take into account all relevant purposes in water and land development * * *.

"To insure the preparation of sound basin programs, Congress should direct the responsible Federal agencies to cooperate with each other and with the appropriate State agencies in the necessary surveys and plans * * *.

"Congress should direct all Federal departments and agencies responsible for the development of water and land resources, in cooperation with interested

States, to promptly review all existing plans and programs, and to cooperate in preparing coordinated plans for water resources development for the several river basins. Plans already authorized by Congress should remain undisturbed unless this review results in specific recommendations for change * * *.

"Flood control should be considered as an important part of water resources management. Conservation storage of floodwaters in the soil, underground, and in surface reservoirs on tributaries and upper reaches of rivers should be a principal factor in the planning and development of river basin programs * * *.

"There is a sobering finality in the construction of a river basin development; and it behooves us to be sure we are right before we go ahead * * *.

"Construction should be initiated on additional projects only as they are clearly shown to be in conformity with revised and approved basin plans, or as they are required to meet the emergency."

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[The Kansas Farm Bureau News]

## 1951 Flood Fails To Follow History

### CREST CAME IN ALL FLOOD AREAS ABOUT SAME TIME

If there is any person in Kansas or any surrounding State who believes the record-breaking flood of July 1951 was one which started somewhere in western Kansas and then swept down the principal rivers to devastate cities along the Kaw, he has been sadly misled.

It is true most major floods in the past have followed a pattern of moving down the broad river valley and damaging farms and cities in its course. Residents of Northen Central Kansas will never forget the historic 1935 flood on the Republican River which started in Eastern Colorado and ravaged farms and cities in its path for a week before it arrived at Junction City and finally Manhattan.

The pattern of the 1935 flood and other similar floods has supplied strong arguments for those who would rely solely on huge dams and reservoirs as a means of controlling floodwaters.

But those who would place their sole reliance on huge dams can find little to support their case in the all-time record-breaking floods of July 1951. In the floods of 1951, water did not spill over riverbanks at Tescott, Beloit, and Blue Rapids one day, then move to Randolph, Concordia, New Cambria and Salina the next day and then to Abilene, Junction City, and Manhattan on succeeding days, and finally to Topeka, Lawrence, and Kansas City several days later.

Official records at the United States Government Weather Observers Office in Topeka show that all crests from Lindsborg, Tescott, and Blue Rapids down to Kansas City in the entire Kaw watershed occurred in a period of about 48 hours.

A check of the official records shows the crests at Salina, at Manhattan, at Topeka, at Kansas City, at Randolph, and at Enterprise occurred within 21 hours.

A further check of official records at Topeka shows at the morning reading July 10 all rivers were within their banks except at Manhattan where there is a natural bottleneck between the bluffs at the north and southeast corners of the city. Manhattan was still about 4 feet over bankfull. There was a slight overflow also at Enterprise, which had very heavy rains the night of July 9.

By the morning of July 11, however, every observation point from Tescott, Wakefield, and Blue Rapids down to Kansas City was reporting overflows, except for Salina and Lindsborg, which had escaped with relatively light rains the night of July 9. It is noteworthy that the Kaw River was overflowing from levees west of Kansas City, Kans., July 11. On the same day sensational rises were being reported at all other points.

By July 12 the Kaw watershed was in full flood from Lindsborg, Tescott, Wakefield, and Blue Rapids down to Kansas City.

Most of the crests at observation points throughout the Kaw watershed were reached July 13, the same day the Kaw at Kansas City poured into the central industrial district.

Following are the crests at observation points checked and the time the crest was reached. All figures are from the official United States Government observer at Topeka, except for Kansas City. That figure was taken from the Kansas City Star.

JULY 12

Wakefield, crest of 16 feet at noon.
Lindsborg, crest of 29.28 at 4:30 p. m.
Junction City, crest of 18.58 at 5:30 p. m.

JULY 13

Wamego, crest of 27.7 at 3 a. m.
Manhattan, crest of 33.5 at 3 a. m.
Tescott, crest of 30.2 at 3 a. m.
Enterprise, crest of 35.6 at 5 a. m.
Topeka, crest of 36.4 at 6:30 a. m.
Salina, crest of 24.1 at 9 a. m.
Randolph, crest of 29.14 at 1 p. m.

JULY 14

Kansas City, crest of 39 at about 12:30 a. m.
Niles, crest of 34.5, estimated, at 2 a. m.
Abilene, crest of 29.55 at 9 a. m.
Enterprise, crest of 33.95 at 12:30 p. m.

Incidentally, the crest of 29.28 at Lindsborg had been previously exceeded only in 1895, 1903, 1938, and 1941. The crest at Lindsborg was only 3½ feet under the all-time record in 1903, despite the fact Lindsborg is only a few miles below the giant Kanopolis Dam.

Obviously, there was deception in a flood map appearing in a Kansas City paper late in July. This map showed there had been no flood on the Smoky Hill River from Kanopolis Dam to within a few miles of Salina. It was not learned whether the deception was inadvertent or deliberate.

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SUBMERGE SELFISH INTERESTS TO SAVE AREA, PRAEGER ASKS

NOW IS NOT TIME FOR ULTERIOR MOTIVES, SEPARATE AGREEMENTS, OR SELFISH IDEAS, KFB PRESIDENT SAYS

"The 100-year flood has come and gone, and brought with it the sobering realization that every person interested in the preservation of our land and water resources must now be willing to submerge selfish interests in order to work out a program which will fit into the needs of this great Midwest area—the bread basket of America," President Herman Praeger said in a statement following the Missouri River Basin conference at Kansas City July 25.

"We simply cannot afford to pass off lightly the tremendous devastation left by the July flood of 1951," President Praeger continued. "In the past we have been apathetic when a few persons lost their crops, were driven from their homes temporarily, or had places of business inundated for brief intervals.

"But the catastrophe of July 1951 should bring stern and sober realization that complete cooperation and coordination of effort is necessary," he continued.

APPALLING LOSSES

President Praeger pointed out that this time people not only were driven from their homes; they lost their homes completely. In many cases the homes represented savings of a lifetime. Not only were crops lost; in some cases the farm was actually lost. There are numerous cases, President Praeger said, where new channels, sand bars, gullies, and debris have destroyed almost completely the productivity of entire farms. Not only have business houses been inundated with loss to stocks of merchandise, but in some cases entire stocks of merchandise, representing the total possessions of some businessmen, have been completely lost.

"I am convinced many farmers and businessmen simply will not be able to resume productive activities without substantial emergency help," President Praeger said. "They have lost all. They don't have sufficient credit to start on their own. No one can realize the tremendous devastation unless he has actually been on the scene. I have driven over the flooded areas and flown over them three times. The devastation is appalling."

President Praeger declared that a comprehensive program must include dams and reservoirs. There must be tremendously increased activity on soil con-

servation with special emphasis on contour planting, terracing, and detention dams. He added that there must be better cropping systems with more land in permanent grass.

"We dare not forget," he said, "that many projects were planned and proposed prior to any real meeting of minds on this tremendous problem of flood control, soil conservation, and all other problems having to do with intelligent land and water use and conservation."

President Praeger pointed to the 1950 report of the President's Water Resources Policy Commission as setting forth fundamental principles which should be made immediately effective. He quoted the following two statements from the report of the President's Water Resources Policy Commission:

"The orderly formulation of national water resources programs requires the establishment of a Federal board of review appointed by the President with the confirmation of the Senate.

"Congress should direct all Federal departments and agencies responsible for the development of water and land resources, in cooperation with interested States, to promptly review all existing plans and programs and to cooperate in preparing coordinated plans for water resources development for the several river basins. Plans already authorized by Congress should remain undisturbed unless this review results in specific recommendations for change."

President Praeger declared that the Federal board of review should be activated immediately. He called for full cooperation and coordination in line with the 1950 report of the President's Water Resources Policy Commission.

"Some persons will have to retreat from previous positions," he continued. "Most agencies may have to make some modifications in earlier plans and proposals. But there should at this time be no effort to circumvent the 1950 report or to stampede public thinking or congressional action on any specific proposal which has not been approved by an over-all Federal board of review not controlled by any single agency."

President Praeger concluded: "The time for ulterior motives, the time for separate agreements between agencies, and the time for all selfish motives is past. We must unite our efforts for the common good."

Senator ELLENDER. Senator Schoeppel, will you proceed, sir.

Senator SCHOEPPEL. Thank you, Mr. Boone.

Now, I want to call on Richard Becker, a senator of our State, who represents the Coffeyville, Kans., Chamber of Commerce.

Senator ELLENDER. Come forward, please, Mr. Becker.

## STATEMENT OF RICHARD BECKER, COFFEYVILLE, KANS., REPRESENTING THE COFFEYVILLE CHAMBER OF COMMERCE

TORONTO DAM AND RESERVOIR, KANS.

Mr. BECKER. Mr. Chairman and members of the committee. I have a statement which I would like to submit for the record. I am not going to attempt to read it because of the time we are taking, but I am going to comment on some points in it and call attention to another matter or two.

I would also like to submit for the record a statement of Mr. Lloyd O. Ford, president of the Coffeyville, Kans., Chamber of Commerce, who intended to be here but was unable to do so.

Senator ELLENDER. The statements may be included in the record.

Mr. BECKER. Thank you, sir.

I wish to call attention to just a few matters and to give you a picture of this project, the Toronto Reservoir, that we are interested in.

The program of the Army engineers envisions the construction of four dams. One has been completed, the Fall River.

If you will look at the map, down in the lower corner you will see the one black area which represents the project that has been com-

pleted. The one just above it is the Toronto Reservoir which we are talking about and urging appropriations for construction.

I wish to call attention to the fact that a year ago, or a little less than a year ago in July, when we attended a hearing on this project, the black Friday of July 13, General Pick was here and made this statement in response to an inquiry by Senator Schoeppel before the subcommittee. He said:

I think the most effective project you could build down in here—

and he was indicating that area—

would be the Toronto Dam.

I wish to emphasize another point, and that is that there is no other review being made in that area. The Missouri Basin Survey Commission is not considering this project. This is not a part of the Missouri River. It flows into the Arkansas River. The protection we ask for is of great importance not only to the southeastern part of Kansas, but it will also add to the flood-control features of the Arkansas River in Okahoma and in Arkansas.

We are asking that this committee reinstate the $3 million asked for this project.

I want to show you gentlemen here that we have had a demonstration that this program works. If you will look at this picture that I hand you, Senator, you will see the flooded Verdigris River, and if you will look toward the top of the picture where you see the smoke coming out of this stack of a cement plant in Fredonia, what I say will be made clear.

That whole area received the same rainfall as the area below did. That river enters the Verdigris where you see the flood in the town at the bottom.

They had the same rainfall, the same excessive amount of moisture, and the water was controlled. Had that project not been in operation, my town would have been flooded because our levees would have been overtopped.

Senator ELLENDER. What is the distance between the two points?

Mr. BECKER. From Fredonia?

Senator ELLENDER. From the point where the flood occurred to the point where there is no flood?

Mr. BECKER. The distance or, rather, the area that was protected, is an area of 75 miles of river. That area was completely protected.

FLOOD PROTECTION BY FALL RIVER DAM, KANS.

Now, if you will turn to the last picture in that book, you will see why that happened. There is a picture of the Fall River Dam with water at the height it was when it was full. There you see the water that was controlled in the proper place, and the water that would have been dumped into this river which was bringing tremendous damage to some—creating some $6 million money damage—damage which would have been greatly increased because in town after town below that dam there would have been damage in addition to the damage to thousands of additional acres of farm land had that one project not been in operation.

OPPOSITION TO TORONTO DAM

Senator ELLENDER. Is there any opposition here as is the case with the Tuttle Creek project?

Mr. BECKER. There is some, but very little. The gentleman who spoke to you immediately preceding me is above that area, and if you will notice, his statement has to do primarily with the Tuttle Creek area.

Senator ELLENDER. Yes; I understand that.

Mr. BECKER. Local opposition does exist, as it does everywhere. You always have some opposition from the area that will be flooded by the reservoir.

There has been introduced in this committee by Mr. Beal a couple of affidavits that were made by men who live in this area immediately above the proposed dam, affidavits by farmers who realize that the thing is inevitable, that it is needed.

You see, this project was authorized some 12 years ago, and those men cannot get roads built, they cannot get bridge replacements, they cannot get utilities to come in—electricity, for example—because they know that this thing will eventually be built. Those people, even above the dam, have come to realize that it is inevitable, and that the quicker it is done the better it will be for everyone.

In the last 10 years the public feeling in that area has changed tremendously. I have been in the middle of it during those years.

Senator ELLENDER. I suppose the huge loss suffered by the people there have tempered the views?

Mr. BECKER. That has tempered the views, but particularly with the operation of Fall River Dam we have seen what can be done. It is not a matter of trial with us any more. We know.

I want to again emphasize the fact that there is no restudy being made now. This is the only plan that has been submitted. It is the only plan that is offered for the control of the floods on the Verdigris River which are of tremendous importance to all of these people, as well as the people in the States of Oklahoma and Arkansas.

I will submit my statement for the record and will not take further time.

I know that you will give it consideration.

I do again wish to emphasize that the Army engineers have repeatedly stated that this is now the key project in this area.

Senator ELLENDER. Your statement will appear in the record.

Mr. BECKER. Thank you, Mr. Chairman.

(The material referred to follows:)

STATEMENT OF RICHARD L. BECKER, COFFEYVILLE, KANS., ON PROPOSED APPROPRIATION FOR CONSTRUCTION OF TORONTO DAM ON VERDIGRIS RIVER IN KANSAS

In making this statement I appear on behalf of the chamber of commerce of the city of Coffeyville, and the city of Coffeyville. While not appearing officially for the Chamber of Commerce of the State of Kansas, as a member of the board of directors of that organization, I wish to state that that organization has endorsed the immediate construction of the Toronto Dam on the Verdigris River.

In this statement I shall make no attempt to give statistics as to the area involved, the dollar value of the tangible flood losses, or estimated construction costs. These figures are all available to the committee and are part of the records of the Army engineers. This information will also appear from other statements presented to this committee.

I do call the committee's attention to the record of the hearings before this subcommittee July 12 and 13 of 1951 as recorded in "Civil functions, Department of the Army" appropriations, 1952, hearings before the subcommittee of the Committee on Appropriations, United States Senate, pages 469 to 486.

I also call attention to the record of the hearing before the House committee: "Civil functions, Department of the Army" appropriations for 1953, hearings before the subcommitee of the Committee on Appropriations of House of Representatives, part 2, pages 444 to 457.

The Verdigris River has its source in east central Kansas, flows in a southerly direction, entering the State of Oklahoma just below the city of Coffeyville, and joins the Arkansas River near Tulsa, Okla. The area which it drains is a fertile and productive valley where wheat, corn, soybeans, alfalfa, and many other crops are grown. The principal cities in Kansas that are directly affected by the flooding of this stream are Neodesha, Independence, and Coffeyville. There are a number of smaller communities that are directly affected in times of flood.

As stated, the area which would be protected by the construction of Toronto Dam is a fertile and valuable agricultural land.

In addition, the cities mentioned are cities having substantial industrial production. Involved are oil refineries, concerns manufacturing parts for B–47 bombers, cement plants, railroad division points, oil-well supplies, mills and manufacturers of many other products.

In the area of my home, Coffeyville, Kans., this river has flooded over 50 times in the last 45 years. The city of Coffeyville is protected by a series of levies; however in 1943 and 1945 (they being the only years when the city proper has been flooded since I have lived in Coffeyville) the levies were not sufficient to protect the city from the high waters. At those times, thousands of people were driven from their homes. Those 2 years I lived closely with that problem as I was chairman of the disaster relief committee of our local Red Cross chairman and it was necessary for us to call upon the American Red Cross for aid.

The Corps of Army Engineers has recommended four dams in Kansas on the Verdigris and its tributaries. Many years ago the Congress authorized the construction of these projects. Appropriation has been made for the construction of only one. This one, Fall River, is in operation.

Gen. Lewis A. Pick in testifying before this committee on the 20th day of July 1952, during the period of the worst floods experienced in Kansas, made this statement:

"Now if we had the Toronto Dam built and this dam just below there on the Verdigris [Neodesha Dam], below the Toronto Dam, and this one here at Elk City [the Fall River Dam, being in operation] we would have handled the flood on the Verdigris" (p. 1012, civil functions, Department of the Army, appropriations 1952, hearing before the subcommittee of the Committee on Appropriations, U. S. Senate).

On that same page General Pick called attention to the fact that the Fall River Dam functioned beautifully and did a lot of good in protecting the area below that dam.

We who live in the Verdigris Valley do not need to rely upon the statements of technical men to know that the plan proposed by the Army engineers would work. The Fall River Dam has had its "baptism of fire." We exhibit to the committee aerial photographs which demonstrate beyond question the effective operation of this dam in controlling the floodwater. Had it not been for the Fall River Dam the area below Neodesha, Kans., where the Fall River empties into the Verdigris, would have had an additional 2 feet of water. This additional water would, of course, have flooded thousands upon thousands of additional acres of rich farmland, and would have done tremendous damage to the cities of Neodesha, Independence, and Coffeyville as the levies would have been topped.

In the Verdigris Valley there is now little opposition to the development of this flood project. Always there will be those immediately above the dams, whose lands will be permanently flooded, who vigorously oppose their construction. This is understandable. However, our people have learned their lesson, have seen the operation of the project, and are convinced that it does work.

The terrible and terrific destruction resulting from floods is difficult to envision unless one has lived close to it. I wish there was some way that we could convey to you the tremendous importance of preventing or lessening the ravaging effects of this most destructive force of nature, and instill in the minds and conscientious of all the Members of Congress a realization of what a flood means.

Another great asset of these dams appears in periods of drought. The structures planned are so designed that they will maintain a constant stream flow during periods of drought.

The cities that I mentioned, together with a number of other cities which are not directly in the flood plain, obtain their municipal water supplies from the Verdigris River and its tributaries. Underground water in substantial amounts is not available in this area, consequently, when completed, will insure for the foreseeable future adequate supplies of unpoluted water for the people living in these valleys. The storage available in the Fall River Reservoir has already greatly improved the water supply for all of the cities located below that structure.

The proposed project, when completed, will comprise four dams: The Fall River Dam upon the river of that name which is complete; the Toronto Dam, for which we are now asking an appropriation, toward the head of the Verdigris River; a third dam near Elk City, Kans., upon the Elk River which enters the Verdigris at Independence, Kans.; and a fourth dam which will be on the Verdigris above Neodesha, Kans.

This must be a Federal project. The construction of these projects by the people in the immediate area or even within the State of Kansas is not practical. This is demonstrated particularly by this river. The four projects on the Verdigris in Kansas are of great importance to the State of Oklahoma because a large portion of this river is in that State; and the controlling of the Verdigris is of great value to the State of Oklahoma and the State of Arkansas because of the protection it provides for the Arkansas River.

I believe that it was the Flood Control Act of 1941 which authorized the four dams on the Verdigris and its tributaries. As the Congress has decided the desirability of the structures the people believe that they will become a reality. Yet, time and time again appropriations have been urged to implement the authorization, to no avail. Even those in the area to be flooded by the reservoirs are damaged by the delay. Should they prepare to move from their farms? Who will purchase the land now? The State and counties are reluctant to improve roads and highways in the area to be flooded. Electric power companies and local REA's do not desire to build lines into that area.

The need for the orderly development of the flood protection on the Verdigris is great. Continued delay means added millions in losses as the floods reoccur.

Last year the Senate provided an appropriation of $3 million to initiate the construction of the Toronto Dam. This had been recommended in a supplemental budget message. However, the appropriation was eliminated by the House and was not retained by the conference committee.

We urge the committee to review the testimony before this committee in July of 1951, and the testimony before the House committee on February 26, 1952. We believe that the necessity of this development has been conclusively established.

We appreciate the desire of Congress to reduce governmental expenditures. We know that the persons affected in each project feel that what is asked is important and that the cuts should come somewhere else. Yet when we consider the appropriations made by the Congress which provide flood-control projects in Italy and ship canals in France, certainly it is proper for the Congress to authorize this construction which is of vital importance to the feeding of our people and the manufacture of products for our defense in the area of our Nation which is the least vulnerable to enemy attack.

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STATEMENT OF LLOYD O. FORD, PRESIDENT OF THE COFFEYVILLE, KANS., CHAMBER OF COMMERCE, ON PROPOSED APPROPRIATION FOR CONSTRUCTION OF TORONTO DAM ON VERDIGRIS RIVER IN KANSAS

The Coffeyville chamber has long been actively interested in the development of a proper flood-control program for the Verdigris River. We are of the definite opinion that the plan of the Army engineers is practical, feasible, and will be effective.

We urge the immediate appropriation of $3 million to initiate construction of that dam.

I have read the statement of Richard L. Becker and endorse what it says.

The Army engineers stated to this committee last July that the plans were then 80 percent complete and that all plans necessary to begin construction were

ready. The balance of the plans would normally be developed and construction progressed.

The business and professional men of our city, the workers, all citizens, have long recognized the need of adequate flood protection on the Verdigris River and its tributaries. Year after year we have watched this river flood thousands of acres of productive farm land. We have watched those who have long resided in these fertile valleys abandon their homes and move to higher ground. We have seen hundreds of acres go permanently out of production because the frequent flooding makes the farming of those acres unprofitable.

We are well aware that no plan is perfect and that complete control of the forces of nature is impossible. However, we believe that when a practical plan has been developed we must act upon it.

My business is selling automobiles. Each year produces improved models. If the purchasers of automobiles would refuse to buy because the current model is not perfect and because they know that time and experience will in the future produce a better model, no automobiles would be sold.

There have been studies and more studies of means and methods of controlling or confining floods. It is our sincere belief that the program recommended by the Corps of Army Engineers is a practical plan and will work effectively. In fact we submit that in our valley practical proof is available. The Fall River Dam and Reservoir has been in operation since 1949. Its ability to control floodwaters has been tested by the greatest period of rainfall that we have on record. Had this flood-control project not been in operation during the terrible rains of June and July of 1951, about one-fourth of the homes of our city would have been affected by floodwaters.

Great as is the actual dollar loss in times of flood, the intangible losses are even greater. The loss of life, the destruction of homes, the disruption of normal living is a loss that cannot be measured in dollars.

The tangible losses and the intangible losses can in most instances be entirely prevented and in all instances can be greatly lessened through the construction of the Toronto Reservoir and the other two dams in this valley.

We respectfully urge the Senate to include in the appropriations for the civil functions of the Army engineers $3 million for the beginning of the construction of the Toronto Dam and Reservoir.

Senator SCHOEPPEL. Senator Ellender, I want to call next on the Congressman from that district, Congressman Myron V. George.

Senator ELLENDER. All right, Congressman George; will you proceed, sir?

## STATEMENT OF HON. MYRON V. GEORGE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

### TORONTO AND STRAWN DAMS, KANS.

Representative GEORGE. Mr. Chairman, I am Congressman George, of the Third Congressional District of Kansas. I am only going to take a minute of your time because we have several witnesses here who have come 1,000 or 1,500 miles to testify before this committee.

As a member of the House Public Works Committee I have during the past 2 years made quite a study of flood control in Kansas. Previous to that I had the honor of serving as a major appointee of Senator Carlson and Senator Schoeppel in the State Highway Department of Kansas.

During that time, every time we had a flood in the State of Kansas on any watershed or any river, we were constantly holding conferences in my office with the engineers and the highway commissioners.

For that reason I am reasonably conversant with the flood picture throughout the State of Kansas.

After having made this study that I have made in the last 2 years as a member of the Public Works Committee, and with the knowledge

that I had previously acquired in the 10 years before, dealing with flood problems as they affected the highway department, I am thoroughly convinced in my own mind that at least in the eastern third of Kansas, where we have a high annual rainfall, there is no method of controlling our floods except by reservoirs. We must build large reservoirs for storage space.

Our soil conditions are such that the saturation point is reached quickly. We have tremendous rains. We have 5- and 6-inch rains.

As I say, when we have these heavy rains, the only thing the water can do is run off. I might also add that since I have been a Member of Congress I have voted for flood-control appropriations throughout the United States because I am a firm believer in the philosophy of spending our own money with our own people for their own protection. I respectfully request that you grant us construction money for the Toronto Dam on the Verdigris River and additional funds for the completion of planning on the Strawn Dam on the Neosho River.

Thank you.

Senator ELLENDER. Congressman, to what extent has the House taken cognizance of this division of opinion on Tuttle Creek, let us say, and on other projects in Kansas? Do you not think that that may have had a bearing on the House not agreeing with the Senate version?

Representative GEORGE. That has had, I think, a tremendous effect because I know that hundreds of thousands of letters were written to the various members.

Senator ELLENDER. It is a great pity that there could not be unanimity of opinion in Kansas.

Representative GEORGE. That has affected our watershed, although we are not involved in the Missouri Valley watershed. We are in the Arkansas-Red River Basin.

Senator ELLENDER. Well, I had particular reference to Tuttle Creek.

Representative GEORGE. Yes, sir.

Senator ELLENDER. Thank you, Congressman.

Representative GEORGE. Thank you, Mr. Chairman.

Senator SCHOEPPEL. Mr. Chairman, I want to take up next the Tuttle Creek Dam which has already been referred to by a number of witnesses. As the first witness I want to call from that area Mr. Z. R. Hook, who is vice president of the Missouri-Arkansas Basin Flood Control Association.

Mr. Hook, please.

Senator ELLENDER. All right, Mr. Hook, step forward, sir.

## STATEMENT OF Z. R. HOOK, VICE PRESIDENT, MISSOURI-ARKANSAS BASIN FLOOD CONTROL ASSOCIATION

MANHATTAN, KANS., FLOOD DAMAGE

Mr. HOOK. Mr. Chairman and gentlemen of the committee, my name is Z. R. Hook of Manhattan, Kans. I appear here as vice president of the Missouri-Arkansas Basin Flood Control Association, and also as chairman of the Manhattan Flood Control Association, a group of Manhattan businessmen.

I desire to present this statement of facts as chairman of the Manhattan Flood Control Association, a group of Manhattan businessmen with interests totaling approximately $5½ million and representing well over 50 percent of the business concerns suffering flood losses in the July 1951 disaster and, favoring the immediate construction of the Tuttle Creek flood-control reservoir.

With it, I request permission to present for your consideration and the record, certain copies of official statements, surveys, and resolutions prepared by the city of Manhattan and the Manhattan Chamber of Commerce which will show direct and tangible losses in the city of some $17½ million resulting from that flood.

FLOOD LOSSES

The indirect loss in depreciated property values, business interruptions and economic depression with recurring tax losses are equally staggering.

I am a vice president of the Missouri-Arkansas Basin Flood Control Association, composed of 25 member associations in the Missouri River Basin and authorized to act for the Kansas Valley in urging reinstatement of all authorized flood-control funds with particular emphasis on the approved and budgeted item of $15½ million to permit an early start on the Tuttle Creek Reservoir, long recognized as a key control for the Missouri Valley and so recognized by the Congress when authorized some 16 years ago and since delayed by lack of funds.

I have been a resident of the city of Manhattan for almost 50 years and, as one of that small army of cooperative observers and reporters of river conditions for the United States Weather Bureau, I have had personal knowledge of all the floods of reliable written record in the Kansas Valley since 1903.

My interest in the rivers, floods, their causes, and controls has caused me to search out and intensely study all available records pertaining to such causes and controls, as well as the historical records and writings indicating disastrous major flood at as early a date as 1724. The records indicate there were 30 disastrous floods recorded between 1785 and 1930, and of late years, as I shall point out, they become of increasing frequency, a mater we must not overlook in future planning.

Insofar as available reports indicate, the greatest of these occurred in 1844 when the stage of the rivers at Manhattan, without question, exceeded the 1951 peak by at least 6½ feet and perhaps more, and I would remind you gentlemen that these great floods occurred during a period in our history when nature's conservation program had not been spoiled by the hand of men, when vast drainage areas were virgin, porous soils, heavily sodded grasses, timbered creek and river bottom lands with deep flowing unhampered streams to carry the floodwaters—here was a land and water-conservation program which men, with all their conservation work, will never approach.

RECORD OF FLOODS

In a period of 50 years, 1901 to 1951, the records show 56 floods and threats of major overflows; 12 were of major importance, 1 every 4 to 5 years. But we must keep in mind that 9 out of the 12 major threats and floods occurred in the last 16 years, indicating the increas-

ing frequency due to accelerated runoff from eroded cultivated fields and the heavy siltation of our creeks and rivers, and I am quite sure from the studies I have made that this condition will continue; that what has happened can, and without question will, happen again since history has a way of repeating. We cannot afford the risk of waiting for that certain disaster to again visit the Kansas and Missouri Basins. Because so much topsoil has been wasted and washed away, even heavy, short showers have produced floods somewhere in the Kansas rivers every year and major disasters have ravaged Kansas in the recent years of 1935, 1943, 1947, and 1951.

Figures for the July 1951 flood gathered by the Kansas Bureau of Government Research, the Kansas Legislative Council, and the Corps of Army Engineers indicate a preliminary loss of $870,245,000, with 2,256,300 acres of land inundated, 183 cities and towns affected, 87,366 persons evacuated, and 18 lives lost. Even this preliminary figure of dollar losses would go far toward the completion of the recommended flood-control project submitted to the Congress and would, without question, materially lessen the possibility of such flood losses, if not completely stop them.

### LOSS TO CITY OF MANHATTAN

Twenty-two million dollars of that loss occurred in the city of Manhattan. This loss in a city of 20,000 with an assessed valuation of $24,538,815 is a staggering loss. While the city has recovered in a very remarkable manner so far as rehabilitation is concerned, the recovery has been made possible only by borrowed funds, with the future heavily mortgaged, and I can say to you gentlemen very frankly and without fear of contradiction that Manhattan business could not, in the foreseeable future, take another such loss and survive.

As we proceed on down the Kansas River below the junction of the Blue and Kansas Rivers at Manhattan the loss mounts very rapidly in that broad valley. At Topeka, I am informed by Mayor Wilkie, our loss may be multiplied by 5 to more than $100 millions, which alone, is in excess of the estimated cost of the Tuttle Creek project.

In my own city 27 homes and industries were carried away completely or laid level with the ground.

Sixty percent of the city inundated, 369 commercial and industrial establishments, and 1,674 dwellings flooded.

Railroads and highways were seriously damaged, closed, or disrupted; 1,800 persons were evacuated and 4,000 others displaced. Many of the evacuated were members of the military personnel at nearby Fort Riley which suffered major and extensive damage on parts of the military reservation.

### TOTAL DAMAGE TO MANHATTAN

Damage, according to a late and very complete survey conducted by the Manhattan Chamber of Commerce, totaled $17,652,802.

For the benefit of you gentlemen of the committee who may not be familiar with our river system and the problem we face, may I point out that Manhattan is located at the junction of the Big Blue and Kansas Rivers, the two together give us a drainage area of 54,506 square miles in the Kansas Valley. The 9,600 square miles in the Blue

River watershed drain the more humid eastern third of Kansas with an average normal rainfall of 37 inches, with the periods of heaviest precipitation May 1 to July 15 when approximately 72 percent falls in the spring and summer months, creating our floods and flood threats during that period. Some of the heavy downpours have measured from 15 to 18 inches in a 24-hour period and rains of from 4 to 7 and 8 inches are frequent. Rains of over 7 inches over an area of 1,000 square miles in a 24-hour periods are matters of official record.

These are the rains with which we are so vitally concerned and the causes of our major floods and, no other program yet devised or offered can, or will, control such torrential rains.

The Blue River contributes approximately one-third of the normal volume of the Kansas River and often, during flood periods, a vastly greater amount.

Manhattan has been flooded by the Blue alone; by the Kansas alone; by the Republican and by a combination of the three when the crests in the rivers are so timed as to meet at Manhattan.

Let no one tell you, as I know they have, and without foundation or benefit of the official records, that the Blue River did not contribute to our flood woe and damage in July 1951.

The United States Geological Survey gaging station on the Blue River 8 miles above Manhattan shows 102,000 cubic feet per second passing that point the evening of July 12, piling up and topping the record flow in the Kansas River at Manhattan, the morning of the 13th.

In the greatest previous flood of written, reliable record at Manhattan in 1903, the Blue River contributed 67,000 cubic feet per second.

### SOIL CONSERVATION

I want you gentlemen to know that I to am a landowner and an ardent soil conservationist. Anyone who has given the time I have in observing the rivers and watching the cream of our soil roll down to the Gulf where we are today building up another State larger than some of our Eastern States—floodwaters too thick to drink and yet, too thin to plow, must realize as I do, that we must stop this waste or go bankrupt for soil fertility in the very near future. But I am likewise convinced that no amount of soil conservation can be a substitute for flood control. Supplemental and very necessary to it—yes, but not a substitute. It is a problem of waste and land and crop damage within itself. It is a problem of waste and land and crop damage within itself just as the control of major flooding is a problem in itself.

I have ample confirmation in my belief from the statements of the trained men who head the various departments of the interested agencies and on whose opinions we laymen must depend for reliable information. I would no more ignore their findings, as the opponents of flood control do, than I would ignore the advice of my trained physician when I may go to him for a physical check up.

### MISSOURI RIVER BASIN AGRICULTURAL PROGRAM

I wish to call your attention to the Missouri River Basin agricultural program, House Document No. 373. I can and do generally agree and recommend that program to you, but the fact remains, it

promises nothing in the way of any immediate control which is so urgent.

From that document I note that the Secretary of Agriculture has no illusions as to the time needed to put his program in effect under present conditions and to secure the voluntary compliance of the land owners affected.

I quote from page 19 of his 30-year $8 billion program:

> Even with acceleration, at least 30 years will be needed for the task * * * at the present rate of progress the desirable results may be delayed at long as a century if, in fact, we are able to realize them at all. This program will contribute to flood control and to the protection of the public investment in large flood-control works.

As a matter of fact, every USDA proposal I have seen or heard of, as does the proposal covering the Blue River watershed and soon to be presented the Congress, lists as annual benefits a very considerable sum in the prevention of siltation in the Tuttle Creek Reservoir which leads me to believe the USDA has and does recognize the need for that flood-control project on this major tributary. Gentlemen, I submit, we cannot wait that long for whatever meager control such a program may offer.

### STATEMENTS OF SOIL CONSERVATION SERVICE OFFICIALS

In his comments on the above document Mr. E. A. Norton, assistant chief of the United States Soil Conservation Service has this to say:

> Anyone who knows anything about the flood-control problem will admit that reservoirs are needed * * * we do not propose to hold back the waters, but to merely reduce the peak runoff. Flood protection dams are needed now, since before the basin land treatment can be completed, four or five destructive floods may have occurred. The proposed plan of the Agricultural Department cannot be justified in terms of flood control, but is based on erosion control and conservation benefits.

Dr. H. H. Bennett, former chief of the Soil Conservation Service and long-time exponent of watershed-treatment practices has stated on several occasions that this kind of program alone will not prevent flooding of the main river valleys and the cities in them and has declared his belief that additional controls such as reservoirs, levees, and other main-channel protective works will be needed to guard the flood plains of the major rivers.

In an address before the Kansas Land and Water Conservancy Association at Topeka, Mr. A. E. McClymonds, regional director of the Soil Conservation Service, Lincoln, Nebr., stated:

> We in the Soil Conservation Service do not claim that we can control major floods with our kind of work alone. Some of the peak flow can be cut down, and this will help, but for the heavier floods there will be needed additional controls in the way of reservoirs, levees, and other main-channel operations. These major engineering operations are the responsibility of the Corps of Engineers.

### STATEMENT ON BEHALF OF DEPARTMENT OF AGRICULTURE

In a letter as late as March 26, 1952, Mr. K. T. Hutchinson, Assistant Secretary of the United States Department of Agriculture, in reply to questions about their report on the program for the Big Blue River watershed which is now under review as part of a supplemental report of House Document 373 states that although this survey included a

study of run-off retardation, it does not include an evaluation of the effects of the watershed program on reduction of flood flows in the main stream below Tuttle Creek Reservoir. The program was formulated and evaluated on the basis of protecting agricultural lands within the watershed * * * and reducing sediment damages in tributary flood plains and in the main stream above Tuttle Creek Dam.

Hence our programs are not, in any sense, a substitute for major flood-control reservoirs of the kind proposed by the Corps of Engineers.

STATEMENT OF CONGRESSMAN COLE

In appearing before the House Appropriations Committee to urge funds for the Tuttle Creek project, the Hon. Albert M. Cole of Kansas, in whose district the project would be constructed, stated that he favored the project because he personally had been assured by the responsible heads of all the agencies interested, that the project was necessary and vital in the Missouri Basin flood-control project.

APPROPRIATIONS URGED BY PRESIDENT

The President, after viewing the recent flood disaster on the Missouri, has again urged the necessary appropriations recommended by him and contained in the budget submitted to the Congress and has plainly stated that such appropriations should not be delayed another year waiting on the report of his Missouri Basin Survey Commission.

RESTORATION OF CUT URGED BY SENATOR HENNINGS

Senator Hennings, cochairman of the Basin Survey Commission, has stated that he strongly favors the reinstatement of funds by the Senate which were deleted by the House and that there need be no delay in making a start on the Tuttle Creek project awaiting a report from the President's Survey Commission.

It seems therefore to be the unanimous concensus of informed opinion that under any of the proposed plans, Tuttle Creek as well as other major flood-control works recommended by the Corps of Engineers are needed and must be in any plan for the control of such floods.

On the other hand, no informed person is in a position to, or will, predict the value of a watershed program in the reduction of flood crests, since such reductions will depend on the topography, type of soil, and the saturation of the soil at the time heavy rains may fall in the watershed, and no one, so far as I can develop, has ever made any such prediction, except the opponents of the reservoirs, and such claims as they have made actually have no basis of facts and figures to support them.

The only reliable answer we have to refute such unfounded claims may be found in part from the lessons learned in the Kansas Valley last July and in the Missouri Valley this spring and that is—that when the soil is soaked and waterlogged as it was during May, June, and July of 1951, no soil-conservation plan yet devised can stop, provide storage for, and hold the torrential rains or prevent the excessive and damaging runoff responsible for the July flood. That has been demonstrated in valley after valley from the very beginning of our written records.

And, as when in the Missouri Valley this spring, a quick thaw of excessively heavy snowfall, with the soil frozen providing a quick runoff, no soil conservation or upland treatment would contain or prevent a flood condition on any of the streams

The lesson to be learned is clearly one indicating the need for impounding the excess runoff to be controlled and the flow regulated downstream from major reservoirs on the main tributaries.

There is no conflict in the thinking of any of the agencies concerning that point. Advocates of flood control by means of major reservoirs do not claim that their program is a soil conservation measure except as it may prevent erosion and land damage in the fertile valleys below the reservoir which annually causes millions of dollars of loss to crops and land and to destroyed farm levees.

Neither do the informed advocates of soil conservation methods claim their program is a flood control program except as it may slow down the peak flows from tributary streams and lessen the danger of excessive sedimentation in the larger control works.

Each program is supplemental to the other in some measure but neither is a substitute for the other.

### CLAIMS OF OPPONENTS TO PROJECT

In connection with the claims of opponents of the large reservoirs that small dams on the creeks and small tributaries can serve the same purpose, I have within the past 2 weeks noted an interesting development by the opponents of the Tuttle Creek project in my own area which clearly shows the inconsistency of their attitude and arguments against flood control. Within the past few weeks, when it became known that the Corps of Engineers had suggested as a supplemental flood-control measure the building of two small dams, one on Rock Creek, a small tributary creek to the Red Vermillion, which, in turn, is a larger tributary to the Kansas River some 30 miles north and east of Manhattan, Mr. Glenn Stockwell, president of the Blue River Watershed Association, and Mr. J. A. Hawkinson, former president of the Blue Valley Study Association, both of whom have appeared before congressional committees here to oppose the Tuttle Creek and other projects and in support of the small tributary dam idea, appeared at a protest meeting of farmers in the Rock Creek-Vermillion area, and did advise and assist those present in the formation of an organization to resist the location of the small tributary dams in the proposed area, claiming that soil-conservation methods alone would accomplish the same purpose. In other words, their action clearly indicates that they, as laymen, are setting themselves up as engineers, without training in such a field, who know more than the trained engineering personnel of both the Corps of Engineers and the USDA, and in doing so they completely ignore all statements of fact by the interested agencies.

Much stress has been placed on and many excuses for delay of action on flood control due to the confusion over what should be done and which program should have priority.

Yet, it appears to me, the problem is very simple and there need be no confusion.

When we think of a cure or alleviation for the wasting and destruction of our fertile soil and farms and natural resources, then that answer is in the program of the USDA—a very desirable and necessary program and one that may rightfully claim to be a supplement to and a part of flood control within its limitations.

The flood control of the Corps of Engineers may be completed and given the needed protection within a few short years if given the needed support by the Congress.

The USDA program, by its very nature, requiring the voluntary compilance of a large number of landowners, is one that may well extend over a period of 25, 50, or, as suggested by the Secretary of Agriculture, 100 years, if, indeed, it is ever accomplished.

Gentlemen, I submit to you that I or no one else can predict when torrential and prolonged rains may again fall in the Missouri Basin. I know from long experience with the rivers what the Big Blue River and the Kansas River and their tributaries have done, can do, and will do again if they are not stopped.

I submit to you that Manhattan, the Kansas Valley, the Kansas Cities, and the Missouri Valley cannot afford the risk of even 1 year's delay when that year could mean the difference between disaster and tragedy and comparative safety for a wide area.

There is yet another aspect of floods that cannot be measured in dollars. As mayor of the city during that tragic period, I saw as did the mayors of downstream cities, the faces of stunned citizens who had lost a lifetime savings in homes and property destroyed, in which there was more hopelessness, utter despair, and misery crowded into 72 hours than I have seen in all my life. It resembled nothing so much as the tragic hopelessness pictured in the faces of those in European slave and refugee camps.

I sincerely hope that neither I or my city may ever again see such tragic disaster. But at the same time I must, from my knowledge of the situation, warn that it can happen again unless you take steps now to prevent it.

The city cannot, the State cannot, only you representatives of the Federal Government can give us the protection we so desperately need for our future welfare.

TOTAL FLOOD LOSS

I would like to call your attention to the survey of flood losses in the city of Manhattan made by the Corps of Engineers shortly after the flood waters had receded, which amount is estimated at $13,394,100, and I would also like to call your attention to a later and more accurate estimate showing the losses to be $17,651,802.

That is a staggering loss, sir, for a city of only 20,000 people.

I would also like again to call your attention to the survey of the damage to the city facilities in Manhattan totaling $1,500,000.

As a member of the city commission, I can say to you very frankly that we will be a long time in replacing and recovering from that sort of a loss in a city the size of Manhattan.

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RESOLUTIONS ADOPTED

Next I would like to call your attention to an attached resolution adopted by the flood-control association of Manhattan to which are attached three resolutions in addition.

I would also like to again call your attention to my statement indicating the great increase in the frequency of the floods in the Kansas Basin. I would like to invite your attention to the figures tabulated by the Kansas Bureau of Government Research, the Kansas Legislative Council, and the Corps of Engineers which indicate a total loss in the 1951 flood amounting to $870 million. Approximately $22 million of that amount occured within the city that I represent.

The total loss in that one flood would provide protection for the entire basin.

In my studied opinion, no program other than the presently authorized and recommended program of the Corps of Engineers offers any solution in the curbing of major floods at any time in the immediate future.

I have ample confirmation of that statement from the highest authorities of the United States Department of Agriculture, from Secretary Brannan, Mr. Norton, Assistant Chief of the Soil Conservation Service; Dr. H. H. Bennett, former Chief of the Soil Conservation Service; Mr. K. T. Hutchinson, Assistant Secretary of the Department, and others who I quoted in my statement.

TUTTLE CREEK DAM, KANS.

I had intended to mention the appearance of Congressman Cole who has already spoken to the committee in which he states that he feels that we must have such projects as Tuttle Creek and that he had been personally assured by the responsible heads of all departments concerned that Tuttle Creek is necessary under any and all plans of major flood control.

The President, as you know, has included the project in his budget. He has recently stated that there should not be delay awaiting the report of the commission.

You heard Senator Hennings state the same thing this morning, that is, that there should be no delay on this authorized project which is so vital to the State of Kansas. He favors the reinstatement of the appropriation.

Only recently Chairman Lawrence, of the basin commission, in a prepared address delivered to the Kansas State Chamber of Commerce said, in part, that the commission was not in any position to hold up construction on any project now under construction, or any flood-control project planned in the immediate future.

Again, to quote him, he said:

> It is not the commission's job to pass judgment on whether the projects are desirable or undesirable.

It would seem then that every agency concerned has indicated that the project is desirable and necessary under any and all programs, from which I would judge that the commission will make no report on the merits of any particular project.

If that is true, then there would seem to be no point in further delay.

I appreciate, sir, as do all of my associates the efforts of the Senate committee in giving us relief from the constant threat of floods in the valley, and we sincerely hope that you will not only reinstate the funds deleted by the House, but that when the matter is before the conference committee of the two Houses the will of the Senate may prevail over possible opposition from the House conferees.

I would remind you gentlemen that the State or city cannot protect, cannot provide the protection we so desperately need to remove this yearly threat, and our future welfare is entirely in your hands.

Thank you, sir.

And I would like to have these statements placed in the record.

Senator ELLENDER. Without objection, they will go into the record.

(The statements referred to follow:)

*Breakdown of flood losses by Corps of Army Engineers*

| | *Estimated amount* |
|---|---|
| Business loss | $8,465,280 |
| Residential loss | 3,309,530 |
| Public property loss | 852,240 |
| Transportation loss | 663,300 |
| Communications and utilities loss | 103,750 |
| Total loss | 13,394,100 |

LOUIS G. FEIL,
*Chief, Engineering Division*
(For the District Engineer).

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*1951 flood losses as prepared from a survey conducted by the chamber of commerce from Jan. 1 to Feb. 15, 1952*

| | | |
|---|---|---|
| Business firms: | | |
| Building loss | $1,071,942.92 | |
| Fixtures and equipment | 1,268,514.18 | |
| Loss of inventory | 3,734,115.82 | |
| Business interruption loss | 4,602,373.14 | |
| | | $10,676,946.06 |
| Homes (1,674) | | 4,498,489.95 |
| Churches (19) | | 107,266.21 |
| Public schools (5) | | 50,000.00 |
| Parochial schools (2) | | 5,500.00 |
| Transportation | | 662,300.00 |
| Communications and utilities | | 136,300.00 |
| County | | 15,000.00 |
| City of Manhattan: | | |
| Sewer | $500,000.00 | |
| Streets and sidewalks | 750,000.00 | |
| Water facilities | 125,000.00 | |
| City buildings and equipment | 125,000.00 | |
| | | 1,500,000.00 |
| Total | | 17,651,802.22 |

The above figures are based upon actual reports as submitted by business firms and individuals. In the absence of actual figures, reasonable estimates were arrived at on a comparative basis.

Only a small portion of the homes reported any deterioration or concealed depreciation and we made no attempt to estimate this loss.

Respectfully submitted.

LUD C. FISER,
*Manager, Manhattan Chamber of Commerce.*

*Distribution of damage to city facilities—1951 flood*

| | | |
|---|---|---|
| I. Sewer systems | | $500,000 |
| Sanitary sewers | $250,000 | |
| 1. Cleaning | 75,000 | |
| 2. Reconstruction | 125,000 | |
| 3. Sewer pumps | 50,000 | |
| Storm sewers | 250,000 | |
| 1. Cleaning | 75,000 | |
| 2. Reconstruction | 175,000 | |
| II. Streets and sidewalks | | 750,000 |
| 1. Reconstruction | 500,000 | |
| 2. Resurfacing | 150,000 | |
| 3. Asphalt sealing | 75,000 | |
| 4. Sidewalks | 25,000 | |
| III. Water facilities | | 125,000 |
| 1. Rehabilitation of wells | 75,000 | |
| 2. Rehabilitation of mains | 50,000 | |
| IV. City buildings and equipment | | 125,000 |
| 1. Buildings | 75,000 | |
| 2. Equipment | 30,000 | |
| 3. Records | 20,000 | |
| Total | | 1,500,000 |

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The Manhattan Flood Control Association, representing business interests of $5,500,000, in session February 18, 1952, unanimously adopted the following motion:

"*Resolved*, That the Manhattan Flood Control Association, through its board of directors, advise the Deficiencies and Army Civil Functions Subcommittee of the House Appropriations Committee of the necessity for an immediate start on flood-control projects long authorized by the Congress and only waiting funds, to the end that we may be spared another such major disaster as that suffered by this city last July; be it further

"*Resolved*, That the board of directors is instructed to urge favorable consideration and recommendation from the Civil Functions Committee to the Congress of the $15,500,000 budgeted item for an immediate start on the Tuttle Creek flood-control project; and be it further

"*Resolved*, That a copy of this resolution be sent members of our congressional delegation and that every possible effort be made to secure favorable action at this session of Congress.

"The time element involved being of paramount importance in the safety of this city as well as the lower Kansas and Missouri Valley, the board of directors of the Manhattan Flood Control Association requests immediate and favorable action to permit an immediate start on this important key flood-control project.

"Z. R. HOOK, *Chairman.*
"H. L. WYLIS,
"FRANK SAGER,
"RALPH STUBBLEFIELD,
"B. L. ULRICH,
"PAUL CALVERT,
"*Directors.*"

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CITY OF MANHATTAN, KANS., *July 24, 1951.*

The City Commission of Manhattan, Kans., at their adjourned meeting held Monday, July 23, 1951, 7:30 p. m., at the city hall, adopted the following motion:

"That the City Commission of Manhattan, Kans., approves a coordinated and comprehensive flood-control plan for the State of Kansas."

I hereby certify that the above motion is on record in Minute Book No. 8, page 166, and is in the office of the city clerk of said city.

[SEAL] ORPHA STEWART, *Acting City Clerk.*

I, Orpha Stewart, acting city clerk of the city of Manhattan, Kans., do hereby certify that the following excerpts are taken from the minutes of an adjourned meeting of the governing body, city of Manhattan, Kans., held Tuesday, January 22, 1952, 3 p. m., at the city hall, with Mayor Z. R. Hook presiding; Commissioners Harold Howe, Ashley L. Monahan, and Richard D. Rogers present; and Commissioner Lillian P. Bascom absent; and that the same appear in register No. 8, page 215:

"Motion by Commissioner Howe, seconded by Commissioner Rogers, carried unanimously that the city commission agrees in principle with the plans submitted by the Army engineers for a ring dike around the city of Manhattan to provide low-level flood protection pending more adequate upstream protection and local study, and further that the city notify the Army engineers and other governmental agencies that might be concerned that the city has authority to acquire the necessary right-of-way for the dike provided the proposal is approved by the voters when the plans are sufficiently completed to be finally submitted for their approval.

"All voted 'aye.'

"Motion by Commissioner Rogers, seconded by Commissioner Monahan, carried unanimously that the city notify the Army engineers, Hon. Albert Cole and other members of the Kansas delegation in Washington and other governmental agencies that might be concerned that it is the sense of this commission that the raising of the Rock Island Railroad bridge and the widening and dredging of the Kansas River channel at Manhattan, Kans., is of paramount importance to the safety of the city of Manhattan, Kans., and its citizens, and that the city commission respectfully petitions that immediate steps be taken to accomplish the objectives set out heretofore.

"All voted 'aye'."

Signed and sealed this 28th day of January 1952.

[SEAL] ORPHA STEWART, *Acting City Clerk.*

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APRIL 9, 1952.

The board of directors of the Manhattan Chamber of Commerce adopted the following flood-control policy as recommended by the flood committee of the Manhattan Chamber of Commerce:

(*a*) That the chamber of commerce endorse a basin-wide program of soil conservation as an essential part of any flood-control program.

(*b*) The Manhattan Chamber of Commerce recommends the development of a coordinated plan by the United States Department of Agriculture and the Corps of Engineers in which maximum practicable use shall be made of water-retarding structures providing maximum benefits from upstream protection, thus effecting modification of large water-retarding structures where possible.

Senator SCHOEPPEL. Mr. Chairman, at this time I want to call Mr. Glenn Stockwell, who represents the Blue Valley, as the Kansas Watershed Association.

Senator ELLENDER. All right, sir, come forward, please.

## STATEMENT OF GLENN D. STOCKWELL, RANDOLPH, KANS.

OPPOSITION TO TUTTLE CREEK DAM, KANS.

Mr. STOCKWELL. Mr. Chairman and members of the committee, my name is Glenn D. Stockwell, of Randolph, Kans. I am a farmer living at the upper reaches of the pool. I live on rented land.

Last summer when the big flood came I was interested in securing a solution to the control of those floods, and since then I have put in a large percentage of my time in seeking a resolution of the facts of the Kansas River, feeling that the solution lay in policy.

My interest lies in policy, and I might say that I appeared before the House Public Works Committee recently in trying to work out with that committee a clarification of our national flood-control policy.

If we are ever to have a realistic national flood-control policy, here is the place to start. Tuttle Creek typifies the confusion that exists among the Federal agencies, the congressional committees, and the people in the matter of flood control.

In Kansas we are vitally interested in flood control. It is about all we talk about, fight about, and study about.

The Kansas State College held a two-day panel discussion on flood control at which appeared leading national authorities to take part in the discussion. The college has had a booklet printed and its extension department is now engaged in carrying that information to the people.

The University of Kansas, through its bureau of government research, has made a review of flood-control plans and has summarized them in a pamphlet entitled "The Missouri River Basin Proposals for Development."

I would like to read to you the first paragraph of the introduction of that pamphlet which states:

> Basic to the democratic way of life is the requirement that Government shall be our servant and not our master. Government exists to serve, not to rule the citizen. This fundamental concept can be brought to successful realization only when full public discussion precedes rather than follows the determination of governmental policy. Full public discussion, in turn, rests on the possession of all the facts. With the facts before him, the citizen is in a position to judge for himself what the policies of his Government should be. With his ballot in his hand, the citizen can determine what the policies of his Government shall be.

I would like to submit this booklet for the file, Mr. Chairman.

Senator ELLENDER. It may be filed.

### ORIGINAL AUTHORIZATION

Mr. STOCKWELL. Tuttle Creek Dam was originally authorized in 1938. At the original hearings I do not believe that a single Kansas citizen appeared for or against the project. Since then it has been placed under review by Congress in House Document 195, Seventy-third Congress, second session, and is now subject to authorization as proposed in House Document 642, Eighty-first Congress, second session.

The height of this dam has been changed several times, the capacity increased 50 percent, the location altered several times, the purpose changed from a multipurpose to a single-purpose reservoir.

A war has been fought and won; we have moved from a food-surplus Nation toward a food-deficit Nation, and the entire economic structure of our economy has been changed.

Through all of these changes it has been maintained that the dam was undoubtedly justified. However, after all of these years there are no definite project costs or benefits for the people of Kansas to consider.

The subsurface geological explorations of the site have not been completed. The area has not been completely core-drill-tested.

The physical feasibility, as well as the economic feasibility has not been definitely established. The question is asked "Why the confusion in Kansas?"

Definite plans, definite benefits, definite costs will quickly dispell the confusion.

JOINT FLOOD-CONTROL PROGRAM

I would like to point out that the Flood Control Act of 1936 provided for the control of runoff on the watersheds by the Department of Agriculture and the control of downstream floods by the Army engineers. Is it not resonable to carry out these two activities jointly and coordinately?

If the watershed treatment has any effect on downstream flow, should not that reduction be taken into consideration in the design of the downstream structures?

Rich as this country is, we cannot afford both programs unless they are integrated as a whole. The people of Kansas believe that since this project is not completely authorized and planned that it should be deferred until it can be jointly coordinated with the upstream work.

We feel that it should be a congressional responsibility to enforce joint coordination through legislative directives if the executive department cannot or will not coordinate its agencies.

FLOOD CONTROL PRIMARY OBJECTIVE

Finally, if Tuttle Creek is found physically feasible from the engineering viewpoint and economically feasible from a realistic comparison of the cost-benefit ratio, then it should be constructed for flood control only, since flood control is our paramount water problem in Kansas.

This viewpoint is, I believe, substantially that of our Governor as shown in the House hearings, part 2, page 361, from which I quote:

> In this flat plains country where stream flow is more or less intermittent, it is believed that electric power is neither practical nor feasible and therefore should not be considered as one of the purposes or uses of any large reservoir. There may be some instances where irrigation is practical, but it is not believed that that would apply to the proposed Tuttle Creek Reservoir.
>
> Therefore, if the Tuttle Creek Dam from an engineering standpoint is a key reservoir and essential to any plan for reservoir control of floods on the Kansas River, it should be constructed as a single-purpose project, that is to say, solely for flood prevention. To accomplish this purpose, it would seem that it could best be of the so-called dry-dam construction which would permit the use of many acres of the fertile Blue Valley farm land during nonflood years. There is more or less general understanding that there can be no objection to the so-called dry dam from an engineering standpoint as a single-purpose flood-prevention project.

This viewpoint also appears to be the opinion of the chiefs of engineers of the railroads serving Kansas City as shown on page 394 of these same hearings from which I would like to read a paragraph of the testimony of Mr. Reece, representing the 12 railroads serving Kansas City, as offered before the House Civil Functions Subcommittee on page 394 of their hearings, as I said. That quotation is as follows:

> They believe—

That is, the 12 railroads—

> that any reservoirs so constructed should be designed for flood-control purposes only and they are opposed to any plans for such constructions which go beyond flood control to include any inconsistent and conflicting purposes such as storage or control of water for promoting navigation, the generation of electric power and other purposes, including the provision of recreational facilities. They believe that dry dams would serve all proper flood-control purposes. They

especially endorse Tuttle Creek Reservoir if designed and constructed for flood-control purposes only.

(See p. 880 for statement of Mr. Reece.)

Vague and inconclusive declarations have been offered to the effect that the operation of the dam might be altered to provide that fewer acres would be inundated.

But there is no firm and credible guaranty that this type of operation would be carried out. A dam for flood control only, according to my interpretation, is an open-bottom dam designed to pass the normal flow of the stream, but to detain the flood flow for a gradual discharge. The operation would be automatic.

The people of Kansas recognize the benefits of this type of construction for the following reasons:

1. It is cheaper to build with no costly gates.
2. It eliminates costly operational personnel.
3. It eliminates the human element of judgment on when to close or open the gates.
4. Such a fixed plan of operation will allow a definite plan of farming in the reservoir area by means of flowage easements.
5. It will lessen the chance of future encroachment on the flood-control features of the reservoir by any Government agency more interested in water impoundment than in flood control.

REQUEST TO WITHHOLD FUNDS

Mr. Chairman, the President has appointed a commission to review the flood and water situation in the Missouri Valley. This Commission expects to make an on-the-spot check of the Blue Valley and interview the people. The people of Kansas have faith in this Commission, in the integrity of this Commission.

I recommend that all funds for this project be refused until this Commission can report.

Senator ELLENDER. When was that Commission created, if you remember?

Senator SCHOEPPEL. Were you speaking to me, sir?

Senator ELLENDER. I was asking the witness about this Commission that he mentioned. I have been informed by the clerk that the Commission was created in January of this year. I understand further that it is to report in February of 1953.

Very well, sir. Have you anything further?

Mr. STOCKWELL. I have with me today the testimony and the statements of various citizens of Kansas who, because of the pressure of business, were not able to appear. This is our planting time in the farming business and the businessmen of Manhattan are busy rehabilitating from the flood.

I offer the statement of Dwight Payton, editor and publisher, and president of the Kansas Watershed Association.

I further offer the statement of R. G. Thomas, a State senator of the eighteenth district of Kansas.

I further offer the statement of Richard D. Rogers, of Manhattan, Kans., at the present time mayor of the city of Manhattan.

I offer also a statement prepared and presented by Miss Lucille Johnson, of Manhattan, Kans., which points out some of the economic and social impacts suffered by the community.

(The statement referred to follows:)

STATEMENT BY DWIGHT PAYTON, PRESIDENT OF THE KANSAS WATERSHEDS ASSOCIATION ON TUTTLE CREEK DAM IN KANSAS

Gentlemen, let there be no mistake about it—opposition to the Tuttle Creek Dam is not confined to the farmers living in the reservoir area, but rather is Statewide, an overwhelming majority. All the State's major organizations except one are on record—Kansas Farm Bureau, State Grange, Kansas Farmers Union, Western Kansas Development Association, CIO, Associated Industries.

To take action in face of such wide opposition is unthinkable. Rather, it behooves Congress, as representatives of the people, to facilitate action on waterways development by promoting real coordination between the Federal agencies involved. This does not mean the wholesale duplication of Pick-Sloan and the Young plan, but rather, surveys that cut through and project beyond jurisdictional boundaries and bureaucratic jealousies.

The majority of Kansas—a big majority, be it said—are no longer confused by agency claims. They know Tuttle Creek is only the key to agency designs and that it is not a key reservoir to any sound flood-control program. Kansas people know the only sensible way to control floods is to seek to prevent floods, that it is utter insanity to destroy our richest bottom land by flooding it in the name of flood control.

Tuttle Creek, as authorized, is enemy to Kansas desires and must not be forced through against majority will.

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STATE OF KANSAS,
SENATE CHAMBER,
*Irving, Kans., May 15, 1952.*

Senator MCKELLAR,
*Chairman, Senate Appropriations Committee,*
*Washington, D. C.*

DEAR SIR: In behalf of the citizens of Irving, Kans., and those residents of Marshall County living in the Blue Valley, we again wish to protest any favorable action on the part of your committee toward building Tuttle Creek Dam. We wish to emphasize the following:

(1) That the place of the Blue River in the flood picture of the Kaw Valley has been greatly exaggerated. The Blue River drains a large territory, mostly in the State of Nebraska, where the annual rainfall is very small. A study of the floods on the Blue River during the last century fails to justify the building of Tuttle Creek Dam as a means of protecting the Kaw Valley. Even in the great 1951 flood, the Blue River had little part. The report of the United States Geological Survey issued after that flood showed conclusively that the greatest flow of water which did the great damage came from the Smoky Hill River below Kanapolis Dam and local inflow along the Kaw downstream from the junction of the Smoky Hill and Republican Rivers.

Why, then, the great hue and cry to build Tuttle Creek Dam to save the Kaw Valley from floods? The statement that this dam is the key to flood protection on the Kansas River is utterly without foundation.

(2) We also call to your attention the fact that many competent engineers, such as those in our State universities, who certainly had a chance to study the situation at first hand, are of the opinion that big dams are not the solution to the flood problem. Surely their opinions must be of equal value to those of the Army engineers.

(3) We also protest hasty action on the part of your Committee toward Tuttle Creek Dam simply because of an unusual flood on the Missouri River, which was in no way connected with the Blue River.

(4) We recommend the study of this problem by the President's 11-man Missouri River Commission, and a careful consideration of that Commission's findings.

Respectfully submitted.

R. G. THOMSON,
*State Senator, Eighteenth District.*

STATEMENT OF RICHARD D. ROGERS, MANHATTAN, KANS.

Mr. Chairman, gentlemen of the committee, my name is Richard D. Rogers, and I am a resident of the city of Manhattan, Kans. Manhattan, Kans., is a city of approximately 21,000 people lying in the center of Kansas. The Kansas River flows along the city limits and the Blue River joins the Kaw or Kansas River approximately 2 miles east of Manhattan, Kans. Manhattan is the home of Kansas State College and is a thriving and prosperous community. During the month of July 1951 our community was approximately 50 percent covered by water ranging from 3 to 6 feet deep. I am here to speak for and to represent a group of Manhattan businessmen who oppose the building of Tuttle Creek Dam and who raised the money to send my delegation here. These men all suffered heavy damage in the flood area and are, of course, vitally interested in the problem of flood control. I imgine that you gentlemen are informed that Manhatten was the hardest hit of the Kansas communities for the size of the city.

Begore I get to my main subject may I thank you gentlemen as Members of Congress for the splendid help that you have already given to help us rehabilitate our city. The RFC alone has made over 350 loans and these officials have done a wonderful job. The FHA has made it possible for the city to plan for 150 homes in the low-cost bracket and 40 of these homes are already constructed. We were furnished 89 trailers in which to house homeless victims of the flood. We now have one of the finest business districts in Kansas and the city is once more on its feet. However, one important point, this money is all going to be paid back with the exception of approximately $300,000 which was given to the city of Manhattan to repair city facilities such as streets, sewer mains, and other facilities having to do with the health and safety of the citizens.

I have in my possession the record covering the testimony heard by this committee and on page 372 I am surprised at what I find.

I was interested to find that this committee was interested in how the people in Manhattan, Kans., felt about Tuttle Creek Dam and the Pick-Sloan plan. I find that Representative Rabaut, in questioning General Chorpening, asked some rather probative questions in regard to the feelings of the duly elected Representatives of the city. I also know that Mayor Hook, of the city of Manhattan, Kans., testified this morning in favor of the dam. I respect the mayor greatly, and we are fine personal friends. But may I inform you that the record is absolutely incorrect in regard to any action being taken by the city commission approving the Pick-Sloan plan or the Tuttle Creek Dam project? I am a member of that city commission; however, I appear here in no official capacity, and Mr. Z. R. Hook appears here in no official capacity. I appear here as a representative of Manhattan businessmen, and I estimate that 75 percent of the businessmen on Main Street contributed money to oppose the dam. May I positively state that the city commission did not on the 28th day of July 1951 pass a resolution approving the Pick-Sloan plan? In truth, the majority of the city commissioners strongly oppose the plan, as do the county commissioners of my county. The representatives of the Army engineers appeared in our city and talked to the commission in regard to the dikes. They stated that they had to find out right away if we had the power to vote money for a right-of-way for the dikes. Gentlemen, we are interested in dikes, we are also interested in having the low railroad bridge moved and having the channel widened. Our resolution came at the urging of the engineers, covered only these specified things, and no more. The mayor requested that the city commission give him sanction for his trip, and the commission refused to do this. He is here today, representing a small group of businessmen and not the city of Manhattan.

I am a layman and no expert on flood control; however, during the last 6 months I have heard more experts on flood control than you can shake a stick at. Reader's Digest says that an expert is a man with a Phi Beta Kappa key on his watch chain and no watch. I do want to tell you what the people in my area are saying. First of all, they all want flood protection but they want to achieve it without the loss of the beautiful Blue Valley, and most of them believe that it can be achieved without Tuttle Creek Dam. The merchants are looking to the Blue Valley trade territory to help pay back the RFC loans. Riley County has already lost two townships to Fort Riley, Kans., during the war and is now the second smallest county geographically in the State of Kansas.

Most of the people remember that the water that came into Manhattan flowed directly north across town. That this water came from the Kansas River and that the Blue River is several miles north and east of town. Thus you hear this comment: We could have had a dozen Tuttle Creek dams and if the rains fall

as they did in July 1951 we will have another flood. The people blame the Kansas River for the flood and feel that the great rainfall south and west of Manhattan in the Kansas River Basin, coupled with the narrow Kansas River channel at Manhattan and the low Rock Island Railroad bridge caused the flood. They firmly believe that if all of the proposed reservoirs had been in place that the cities of Manhattan, Topeka, and Lawrence would have suffered the same damage.

What are the experts saying? The Army engineers at first stated that the reservoirs would have saved Manhattan, and I believe they actually thought so. Later statements in the newspapers used cautious terms such as the crest would have been reduced and cut by 1 foot to 18 inches. They were forced to drastically revise their plans to add numerous small dams on the tributaries. The very plan that they have been fighting and have refused to use in the Blue Valley area. Gentlemen, the newspapers in my area have commented greatly on this switch.

What are other experts saying? On November 27 and 28, 1951, Kansas State College held one of the finest flood forums with a large group of experts assembled. The speakers were men like K. M. Sandals, of the Soil Conservation Service; F. D. Farrell, ex-president of Kansas State College; Louis G. Feil and Colonel Lincoln, of the Corps of Engineers; Leslie Miller, ex-Governor of Wyoming and a member of the Hoover Commission; Tete Dalrymple, of the United States Geological Survey; John Ise, economics department, University of Kansas; John G. Stutz, chairman of the Kansas League of Municipalities, and Richard G. Baumhoff, author of books on the subject. This conference for the first time recognized that flood control is not a technical problem alone but also an economic and social problem.

At this forum, the discussion group at my table asked the following question to one of the experts who had accurately measured the stream flow of the flood: "Did your survey disclose that the proposed reservoirs would have lessened the damage in any appreciable degree at Manhattan, Lawrence, Topeka, or Kansas City?" The witness declined to answer the question on the platform. However, my group then moved to the area and asked him the identical question. He stated that he did not wish to get into a fight between bureaus but that he was perfectly willing to give us his opinion. His opinion was that the reservoirs would have in no way lessened the damage and to prove his point he asked us the following question: "How can reservoirs catch water when the bulk of the water falls below the reservoir?" He then showed us that the bulk of the rainfall fell in the Junction City-Alta Vista area. This gentleman was from an independent Government bureau, and he had made the most comprehensive survey and measurement of the stream flow and rainfall that had been made. This speaker was the Geological Survey man, and his statement was written up in the Manhattan Tribune News.

Another speaker in our area that impressed us very much was Mr. L. D. McDonald who was formerly with the Corps of Engineers and was in charge of flood-protection measures in the Kansas City area. He spoke in Junction City, Kans., in January 1952. He stated that Congress asked the Corps of Engineers for a restudy of the Pick-Sloan plan and that no restudy was made in direct violation of the orders of Congress and that the plan was then resubmitted. That they now plan to change the way of life in the Kansas River Basin by the eventual expenditures of $15,000,000,000.

Statements like these do not make us advocates of the Pick-Sloan plan. He further suggested that a civilian engineering firm of national reputation be hired to study the entire problem and if they find that certain things are necessary and that the benefits exceed the costs then let the chips fall where they may.

The head of the department of civil engineering at Kansas State College stated that the outstanding idea to arise from the Kansas State flood forum was the talk by John G. Stutz, head of the league of municipalities, on the subject Clearance of Floor-Threatened Areas.

I ask that the summary of his remarks issued by Kansas State College be made a part of the record. I also ask that the remarks of Gov. Leslie Miller, of Wyoming, K. M. Sandals, and Gladwin E. Young be entered in the record.

What conclusions do we arrive at after listening to all of this testimony in our area and what do we suggest?

1. Explore the possibilities of the watershed plan. In my area we have incorporated the Blue Rivers Valley Watershed Association, Inc. We are rapidly signing up farmers. Let us see what we can do with soil conservation, farm ponds, and check dams. Let the farmers pay a part of the cost with their own labor and equipment. Have the engineers help us with small dams on the tributaries instead of fighting the plan.

2. Study the possibilities of clearance of flood-threatened areas. We know you can't move the Kansis City industrial district but you can protect it with dikes—(quoting former Army Engineer McDonald). In many cases it may be far cheaper to restrict buildings in the flood plain and necessary to move certain flood-area districts.

3. Determine whether the cure will be worse than the disease. Can we afford to use money that we do not have, to destroy rich agriculture land when the benefits are dubious?

The opposition to Tuttle Creek has been bitter for years. If the proponents of the Pick-Sloan plan can win and quiet this opposition then Congress is committed irrevocably to the entire plan which envisions the expenditure of billions of dollars. Then the other dams must be constructed or Congress is inconsistent in its thinking. You gentlemen know what we can afford, can we afford the Pick-Sloan plan? Gentlemen, these are the thoughts of the people in our area.

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STATEMENT PREPARED BY MISS LUCILE JOHNSON, MANHATTAN, KANS.

*To the Civil Functions Subcommittee of the Senate Appropriations Committee:*

I wish to write you as a citizen of an area that is vitally concerned about and involved in flood control. I teach in the city of Manhattan on the Kaw River and my parents' home is on a farm near Randolph on the Blue River, so I am well acquainted with flood problems and controversies.

Since we are people of the land we are close to an understanding of how rain and streams act in relation to land. We therefore see matters from a different point of view than people of the cities. Experience has convinced us that over-all watershed treatment and engineering is obsolutely essential in a flood-control plan. But I can easily see how a person in a downstream city, seeing water come upon them, would feel that big dams would be the only solution.

What greatly concerns us is the fact that certain groups are putting forth tremendous pressure for the construction of Tuttle Creek Dam. For years we have been aware of these special interests that have been trying somehow to get this dam in. We are also aware of how they jumped to their opportunities after the disastrous floods of last July. In their hurry to press their advantage they made misstatements, planned big-dam propaganda meetings, and by their very eagerness created boomerangs for themselves. We are aware, and you are, too, no doubt, of how they had to "forget" or reinterpret some of their former statements, when facts became known to the general public.

You have much material on the cost of this project, I am sure. The present estimate, I believe, is $79,000,000, but the majority of official congressional opinion feel this sum would be far too low. I will not go into that. What I want to write to you about is the Blue Valley, and what Tuttle Creek Dam would do to it.

There would be the economic loss to every member of the 55,000-acre area that would be condemned. (According to some downstream people, it is our "selfish concern" in this respect that is holding up construction of the dam.) There would be the crippling economic loss to the surrounding urban areas, since an annual $6,000,000 worth of products come from the valley. If you could see the type of farms, farming equipment, and modern homes (electrified for 30 years) you would better understand the loss. The farms are geared to high, modern production. The rich valley land, under favorable weather conditions, produces 100 bushels of corn to the acre. This corn is winter fed to the cattle, which graze on adjoining hills during the summer. The integration of pasture and bottom land is true of all valley farms.

These farmers are good farmers, progressive farmers, working highly mechanized farms. They have owned them for a long time, or else inherited them, because no one sells land here. Flooding the valley would displace them. Six hundred farmers trying to acquire any kind of land, much less the kind of farms they would have to leave, is next to impossible. They would have to do something else. Society can ill afford to lose such trained agriculturalists, but that is what would happen.

But one of the biggest losses resulting from the building of the reservoir would be the destruction of several communities. That loss would be above price. To this area came the first Swedes in Kansas in 1855. They established a church, the first Swedish Lutheran Church west of the Missouri River, which is still the center of my home community. Five daughter churches were established from this center. It is of these people I wish to write.

The people are hard working, honest, and well educated. They have a strong sense of community obligation. They believe in a workable democracy. I can truly say that there isn't a family in our church that hasn't contacted its various governing agencies in some way. Other communities do the same. They belong to farm, educational, and civic organizations. At present, I am sure there are few other communities so thoroughly educated on various types of flood control. All belong to watershed associations, and the majority of farms are on the way to being remodeled on soil-conservation lines. Some are putting in detention dams.

These families have contributed sons and daughters who have gone into all fields of activity, in and out of the valley. If you will pardon a personal reference, I would like to use my father's family as an illustration. Statistics show six farmers, one college president, two FBI men, one director of highways, one medical missionary, and later, an eye specialist, one occupational therapist, two parish church workers, one minister, one minister's wife, two teachers, and one superintendent of schools. Of the 42 adults, 28 have completed college, 7 others have had some college work. Across the river from us is a homestead whose family includes, besides several farmers, two engineers, two doctors, two ministers, two college professors, a movie producer, lieutenant colonel in the Army, financial secretary of a State university, a chemist, two bankers, and a top geologist. Similar statistics could be produced for other families.

Perhaps this is sample enough to indicate what kind of communities are being destroyed by the big dam. Even if it would be operated "dry" the construction plans have not changed, so this whole area will be condemned and the communities lost.

Aside from the fact that the project is not economically justifiable, it does not seem morally justifiable to me. Neither will the Army engineers sign on the dotted line that Tuttle Creek Dam will give the protection enthusiastic propagandists have claimed. Is it fair to people in the Blue Valley and the lower Kaw to develop an outdated plan, when the sounder idea of beginning with the watershed treatment is fast material'zing?

I am a history teacher, so I know whereof I speak when I say that history is full of the rise and development of new trends. That is what has made our country great. A new trend is starting, now. Unfortunately, new progressive ideas have a hard time getting started, because people in general resist change, and because some few, who gain from old policies, resist, also.

I appreciate the responsibilities and difficulties your committee faces. I have faith that you will study the problem, impartially, and start our country on the road to the wisest land and water plan. I hope that this letter might give you another slant on the situation.

ARBITRATION ON TUTTLE CREEK DAM

Mr. STOCKWELL. I thank you, Mr. Chairman, for the opportunity of appearing, and we hope you will solve the problem.

Senator ELLENDER. We are glad to have had you.

Let me ask you this: Do you expect any differences of opinion amongst the people of Kansas after this commission recommends a certain course of procedure? You know, people are prone to remain hard-headed.

I am just wondering whether this commission can bring the hard heads together and soften them up a little bit so that we can go along with this.

Of course, we follow the views of the engineers and those who make the study of the project. If this opposition persists, I can well understand why the House will probably not follow the action of the Senate. I am very hopeful that you folks can get together and save your great State and, in fact, that whole area, from any further damages similar to those suffered in the past few years.

Mr. STOCKWELL. Well, as I pointed out, Mr. Chairman, both our State college and the university are conducting an educational program

and printing these booklets which they are distributing. We are trying to bring the story to the people who have the divergent viewpoints.

I feel that they will accept the returns of that commission. There will be a few in the dam area, there will be some interests downstream who will want some special concessions and who will not be satisfied.

But the bulk of the people of Kansas is what you have to look to.

Senator ELLENDER. I was under the impression up until recently that the majority, or the bulk of the people of Kansas, wanted these projects as we voted for them last time. But I find that there is continued opposition, notwithstanding the fact that they have had visible evidence of the great damage caused by the recent flood. That is something I do not quite understand.

Mr. STOCKWELL. Well, the flood was immense, and the damage was immense and it is necessary to have the best solution that it is possible to arrive at.

Senator ELLENDER. Thank you very much.

Senator SCHOEPPEL. The next witness I want to call is Mr. Willard Breidenthal, who is the chairman of the Greater Kansas City Flood Protection Planning Committee.

Senator ELLENDER. All right, sir, come forward, please.

## STATEMENT OF WILLARD BREIDENTHAL, CHAIRMAN, GREATER KANSAS CITY FLOOD PROTECTION PLANNING COMMITTEE

TUTTLE CREEK DAM, KANS.

Mr. BREIDENTHAL. Mr. Chairman and gentlemen of the committee, my name is Willard Breidenthal and I am chairman of the Greater Kansas City Flood Protection Planning Committee.

Twice in 10 months the Middle West has huddled behind temporary sandbags, awaiting a flood. In less than a year, a billion dollars has been lost to the economy of this area. This terrific loss and the constant fear of destruction and suffering are taking their toll of morale and confidence in the large industrial and agricultural centers in the Missouri Valley. The pitiful part of the entire situation is that it is all unnecessary.

We have a good flood protection plan (partially built) which would have spared Kansas City and the surrounding territory a large part of the damage which occurred in 1951 and again this year. This comprehensive plan is as big as the problem which it was designed to solve. It cannot be built overnight. The problem before us today is whether we should step up the tempo of construction now or allow ourselves to further drift into the deplorable state best described as "too little and too late." It is only logical and economical that we do the most important things first. We have built the most critical local levees for partial protection in metropolitan areas, and we have virtually completed Kanopolis Reservoir on the Smoky Hill and Harlan County Dam on the Republican River. These municipal levees and the upstream reservoirs are not enough. We must, without further delay, build the Tuttle Creek Reservoir to stop the Big Blue, a major tributary of the Kansas River.

EFFECTIVENESS OF TUTTLE CREEK DAM

We realize that Tuttle Creek alone cannot prevent the largest flood on the Kansas River, but it can reduce it by about 100,000 cubic feet per second. It can completely control some of the lesser floods which have cost us millions of dollars. In every plan for protection of the Kansas River Valley, the Kansas Citys, and the Lower Missouri River, Tuttle Creek has played a leading role. Such protection plans have been designed and thoroughly reviewed by the Corps of Engineers and by local interests who, at their own expense, retained the late Frederick Fowler of San Francisco, a nationally recognized figure in the field of river hydraulics and flood control. In all of these plans the Tuttle Creek Reservoir was included as an essential reservoir without which full protection would be infeasible. The importance of Tuttle Creek is further attested to by the fact that the chief engineers of 13 railroads have approved it for protection of the Kansas Citys and the Kansas River Valley. These railroads represent a large percentage of the transportation facilities in Western United States and the recommendation of their top level engineers is, therefore, quite significant.

LOSSES SUFFERED

Another detailed description of the losses and human suffering which occurred in July 1951 and again in April 1952 would be superfluous. The people of our area were confident last fall that the voluminous evidence presented to Congress after the flood would be sufficient to merit immediate appropriation of construction funds. (There has now been a 14-year delay since Tuttle Creek was authorized in 1938.) The evidence of desperate need is accumulating * * * our losses are continuing * * * we dare not delay any longer. We know all too well that if work on Tuttle Creek were started tomorrow it could not contribute to the protection of the Kansas Valley until 1956 or 1957. The economy of our region, in fact the Nation at large, cannot withstand many more flood losses. In a few short months we have lost enough money to build a dozen Tuttle Creeks. We do not wish to wait more months just to hear another commission tell us that we should build this key reservoir.

Residents of the valley and metropolitan areas shudder at the possibility of a Missouri River flood coinciding with one from the Kansas. Such a situation would bring complete catastrophe from Kansas City to the mouth of the Missouri River. This possibility has been fully and horribly demonstrated in the past 10 months. Only a last-minute shift in weather fronts on April 22, 1952, eliminated threat of a flood which could have topped the July 1951 disaster. By the narrowest margin, the water and power plants in the Kansas Citys were saved in 1951, but we may not be as fortunate again. A million people without water and electricity would be a threat to our national security and defense efforts. To tolerate this possibility, when a reasonable solution is within our command, is unthinkable in free America.

Progress is being made on the main stem reservoirs on the Missouri River above Kansas City, but reasonable protection for the cities and farms in this lower area is still in the distant future. While the door is slowly being shut against floods originating north of our area, we

must begin to shut the door in the Kansas Basin. The first step is the construction of Tuttle Creek. Until Tuttle Creek is built every spring season will remain, for a million people, a very real and constant threat to their lives and property. Tuttle Creek Dam needs no further study to establish it as an essential part of any comprehensive protection system. Sufficient plans are ready to let the first contract as soon as land is purchased. A million people in this area want the present paper plans converted to concrete and earth as soon as humanly possible.

My connection with this matter as Chairman of the Kansas City Flood Protection Planning Commission, started in 1934. Our committee was organized at the request of the then Water Planning Committee of the National Resources Board.

We were requested to raise funds and to employ a nationally known water engineer, not a local engineer. We did that and employed Frederick H. Fowler, of San Francisco, I think the leading water engineer of the country at that time.

Now, Mr. Fowler passed away some few years ago, so we had no further benefit from his advice and counsel. However, he did make a report on the flood situation at Kansas City and what would be required to protect that greater Kansas City area comprising over $1 billion invested in industrial properties and affecting approximately 1 million people in the greater Kansas City area.

Now, we also formed a committee of the chief engineers of the 12 trunkline railroads that enter Kansas City and included as the thirteenth member of that group the chief engineer of the Kansas City Terminal Railroad Co.

In February of 1952 the chief engineers of all 13 of these railroads carrying the responsibility for the operation of approximately one-third of the railroad mileage of the United States, which number includes the number one railroads in our area, the Santa Fe, the Union Pacific, the Burlington, the Rock Island, the Gulf, Mobile & Ohio Railroad Co., the Missouri, Kansas & Texas Railroad, the Kansas City Southern Railroad, the St. Louis-San Francisco Railroad, the Chicago, Milwaukee-St. Paul Railroad, Wabash, Missouri Pacific, and the Chicago Great Western Railroad, passed a resolution.

I would like to hand this document to you, Senator, and you will note that the railroads are opposed to navigation. They are opposed to reservoirs for any other purpose than flood protection which we accept.

As now designed, Tuttle Creek Reservoir, which is the main reservoir, and without which there can be no adequate flood protection or flood control on the Kansas River below Manhattan, is so designed.

The Flood Control Act of 1936 authorized the Kansas City project. The report of our engineer was not completed until 1937.

### OTHER FLOOD DAMS

The Tuttle Creek and Milford Reservoirs were authorized in 1938.

Harlan County Reservoir, which is to be dedicated as a completed project on June 10 of this year, was substituted for the then authorized Milford Reservoir.

However, in the plan for flood protection, Milford Reservoir with Perry Reservoir and other improvements along the Kaw River at

local points, were included as necessary projects. Those projects are pending before the Public Works Committee of the House in Document No. 642.

Now, I want to say that we have followed this program through from 1934, 1936, 1938, and 1944. Those are the outstanding dates in the matter of congressional action with reference to the control of floods.

The 1944 act was essentially the Pick-Sloan Act, which became the comprehensive plan for flood prote tion and other purposes in the Missouri Basin.

I want this committee to realize that opposition to definite projects which are a part of the comprehensive plan is bitter. There has been no project completed as a part of that plan, but that it has had the universal acceptance both as a measure for flood control and other purposes.

But they have all operated perfectly and in accordance with the judgment of the Corps of Engineers as to their effect in controlling the water runoff on those streams.

Now, we are not desirous of waiting longer for a start on Tuttle Creek. I heard Mr. Stockwell testify before Congressman Jones' committee last week, and he said that Tuttle Creek should be deauthorized because it has not been built in 10 years.

Now, if I am making a misstatement, he is here and he can deny that if he wants to.

COMMENT ON AWAITING COMMISSION REPORT

But how can you reconcile that statement with his statement here that he has no further objection to Tuttle Creek, but that he thinks that further study should be continued and engineering and economic reports made.

The 21 steps that are necessary to get this project up to a point where it is available for appropriation have been taken.

Mr. Stockwell has lived in Kansas all of his life, I think, and he knows what has been going on.

I am here on behalf of the interests that I represent to urge an early start in order to get an early completion of that project for its beneficial effects.

Senator ELLENDER. But you want to relegate it solely to flood control?

Mr. BREIDENTHAL. Sir, the resolution of the chief engineers of these 13 railroads states that clearly, and we accept the present plan of that project which does exactly that.

Senator ELLENDER. I see. But a great deal of these objections are based purely on selfish reasons; is that not right?

Mr. BREIDENTHAL. Yes. But remember this, that the statutes require the submission of a project to these different agencies, and they are the ones who put these other considerations in and make multiple-purpose project out of a flood-control project.

Originally, in 1937 and 1938, Tuttle Creek was a single-purpose reservoir because you had not made that requirement. Now, I take it for granted that these other agencies have released the 495,000 acre-feet of capacity that was in there for multiple purposes and they have

released it for the benefit of flood protection after the experience of the 1951 flood.

Now, we are deeply appreciative of the action of this committee, at the last session, in recommending $5 million to start Tuttle Creek notwithstanding that that was not in the House bill as it came over to the Senate.

I was here on the morning of July 13 and left at 2 o'clock for Kansas City without getting an opportunity to be heard. We urged the committee to take favorable action on the recommended budget appropriation for Tuttle Creek.

We see no way of securing flood protection for the area that I have mentioned without Tuttle Creek being constructed as the key project. It is the only project which this committee could appropriate for at this time to control floods on the Kansas River.

Senator ELLENDER. Thank you, sir.

Without objection, the statement signed by the engineers for the railroad companies will be made part of the record.

Mr. BREIDENTHAL. Thank you, sir.

(The statement submitted is as follows:)

STATEMENT OF A. N. REECE, VICE CHAIRMAN AND RAILROAD REPRESENTATIVE, FLOOD PROTECTION PLANNING COMMITTEE FOR GREATER KANSAS CITY

The present effort to obtain flood control and flood protection in the Kansas City area is not a recent development or a result of the disastrous flood of July 1951, but has extended over a period of approximately 20 years, with numerous hearings before Congress and agencies of the Government as well as many other private groups and committees. Briefly, the present concerted effort to obtain functional flood control and flood protection works began in 1933, on October 10, with a meeting held of the joint flood protection committee of the Chambers of Commerce of Kansas City, Mo., and Kansas City, Kans., for the purpose of discussing the flood-protection problem.

On October 19, 1933, the chief engineers of all the Kansas City railroads met in the office of the chief engineer of the Kansas City Terminal Railway Co. for the purpose of discussing the plan covered by surveys of Capt. Theodore Wyman, of the United States Army engineers, and embraced in House Document No. 308 and generally known as the 308 Report.

On November 14, 1933, the chief engineers of the 12 Kansas City railroads, or their representatives, again met in the office of the chief engineer of the Kansas City Terminal Railway Co. to discuss with Captain Wyman the proposed high levee plan recommended by the 308 Report, and the engineers of the various railroads, following the meeting, adopted a resolution opposing the high levee plan due to the impracticability of its application, the very extensive changes in railroad operations that would be involved, and the fact that the plan would place the railroads' industries almost entirely within the river bottoms behind excessively high levees, which was felt would not be conducive of further industrial development.

Following a further meeting of the chief engineers of the railroads, in the office of the chief engineer of the Chicago, Milwaukee, St. Paul & Pacific Railroad, at Chicago, the railway engineers submitted to the Mississippi Valley Committee of the National Resources Board, at Washington, a report dated August 10, 1934, covering the effects of the high-levee plan upon the various railroads serving the Greater Kansas City area. On October 18, 1934, the joint flood protection committee of the Chambers of Commerce of Kansas City, Kans., and Kansas City, Mo., together with the representatives of the railroads and industries and civic organizations, had conference with the Mississippi Valley Committee of the National Resources Board, and as a result of this conference, and at the suggestion of the Mississippi Valley Committee, the local chambers of commerce held a joint meeting on October 30, 1934, for the purpose of organizing a small committee to further the study of flood protection or the control of floodwaters. The committee formed was known as the flood protection planning committee for Greater Kansas City, with five members, one of whom

represented the railroads, one the industries on the Kansas side of the Kansas River, one the industries on the Missouri side of the Kansas River, one representing the municipal, county, and State political subdivisions of Kansas, and one the municipal, county, and State political subdivisions of Missouri. Following this meeting, on November 20, 1934, the flood protection planning committee met with an engineer sent out to Kansas City by the Water Planning Committee (successor to Mississippi Valley Committee), who recommended the flood protection planning committee engage a consulting engineer of high professional standing and nationally known (but not a resident of either Kansas or Missouri), for making a comprehensive study of the problem, in which survey and technical data would be provided by the Army engineers, and suggested Col. Henry M. Waite, of Cincinnati, Ohio, as being a nationally known engineer, and entirely familiar with the work of similar nature, as being acceptable to the water planning Committee. Following this meeting, on January 2, 1935, the flood protection planning committee interviewed Colonel Waite, at Kansas City, and made an effort to engage his services for the study and formulation of a plan for the Greater Kansas City area. Colonel Waite declined to accept the assignment by reason of other commitments, but recommended that consideration be given to Mr. Frederick H. Fowler, of San Francisco, Calif. Later an interview was had with Mr. Fowler and arrangements were made for his employment to carry out the study and formulation of a plan and all interests represented on the flood protection planning committee were advised of Mr. Fowler's engagement, including the chief engineers of the 12 railroads serving Greater Kansas City, and the cost of this arrangement, estimated at $25,000, was prorated among the various interests.

Mr. Fowler's studies of the greater Kansas City flood-control problem were started in the early part of 1935 and his report rendered in April 1937. Distribution of the report was made to all those interested and represented on the flood protection planning committee, including the chief engineers of all the Kansas City railroads. His conclusions were that the plan for the solution of the greater Kansas City flood problem represented a clear-cut conflict between control of river flow by upstream reservoirs, far reaching in effect, as against flood protection by levees purely local in character. Mr. Fowler's recommended plan was that relief from flood be sought by river control through reservoirs, with only such auxiliary levees and channel improvements as were necessary at municipalities and industrial centers to insure successful operation of the system.

The principal reservoirs recommended by Mr. Fowler were Tuttle Creek, on the Big Blue River, with a capacity of 1,180,000 acre-feet and Milford Reservoir on the Republican River with a capacity of 1,170,000 acre-feet. In addition to the two major reservoirs there were other reservoirs of an auxiliary nature recommended as follows: Onago on the Red Vermillion River, Perry on the Delaware River, Clinton on the Wakarusa River, and Linwood on Stranger Creek. With these reservoirs it was recommended that a certain amount of levee work be carried out at Junction City, Kans., Manhattan, Kans., Topeka, Kans., Lawrence, Kans., and at the Kansas Citys, along the Kansas River and the Missouri River.

The work done by the Army engineers in conjunction with Fowler's report was to be carried out under an allotment by the Water Planning Committee. Twenty-five thousand dollars was appropriated for this purpose and the amount was later increased.

The essential features of the Fowler report were used in the Pick-Sloan plan and are embodied in the Army engineers' various reports to Congress. Further, in May 1938, the House Committee on Flood Control submitted Report No. 2353 to the Congress, to accompany H. R. 10618, and as a result of H. R. 10618 the Senate and House of Representatives passed Public Act 761 of the Seventy-fifth Congress. House Report 2353 and H. R. 10618 recognized the general comprehensive plan for flood control and other purposes in the Missouri River Basin, as set out in Flood Control Committee Document No. 1, Seventy-fifth Congress, first session, and Public Act 761 authorized $9,000,000 for reservoirs. House Report 2353 also acknowledged and approved the comprehensive plan set forth in Flood Control Committee Document No. 1, Seventy-fifth Congress, and listed the planned reservoirs as Milford, Kans., Tuttle Creek, Kans., and Kanapolis, Kans.

Neither of the two most important reservoirs recommended by the flood protection planning committee's consulting engineer and the Army engineers, and

acknowledged in House Report 2353 (Tuttle Creek and Milford) have yet been constructed, due to lack of appropriations, and Tuttle Creek Reservoir still remains a most important flood-control facility, with Milford Reservoir of only slightly less importance.

It is desired to emphasize that to this date the original recommendations of the flood protection planning committee's consulting engineer, Mr. Fowler, and the Army engineers have not been changed or altered by the numerous subsequent studies, except by the inclusion of additional reservoirs and reservoir capacity due to knowledge gained from the July 1951 flood, and the need for Tuttle Creek Reservoir is still great, if not greater, than when originally recommended. It is therefore the opinion of the undersigned and the flood protection planning committee for Greater Kansas City that further study of the need for this facility cannot be economically justified, since the reservoir and levee works recommended under the Fowler report have not been progressed to completion and, therefore, funds should be appropriated immediately for progressing Tuttle Creek Reservoir to completion, in accordance with the original and repeated recommendations of the Army engineers and this committee.

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OFFICE OF CHAIRMAN,
RAILROAD ENGINEERS' COMMITTEE ON FLOOD CONTROL,
*Kansas City, Mo., February 14, 1952.*

At meeting today of the chief engineers, or their representatives, of the railroads serving greater Kansas City, to consider the carrying out of the flood protection works on the Kansas River and its tributaries, and the beneficial effect in controlling floods in the Missouri River below the Kansas Citys, the railroad engineers make this resolution:

*Now therefore, be it resolved*, That railroads serving greater Kansas City endorses principle of flood-control and protection by levees and reservoirs as being essential and very important parts of any plan to control floods and as beneficial not only to the areas immediately below the reservoirs but through the Kansas Citys and along the Missouri River to its mouth, they believe that any reservoirs so constructed should be designed for flood control purposes only and they are opposed to any plans for such construction which go beyond flood control to include any inconsistent and conflicting purposes such as storage or control of water for promoting navigation, the generation of electric power and other purposes, including the provision of recreational facilities; they believe that dry dams would serve all proper flood control purposes.

*Be it further resolved*, That they especially endorse Tuttle Creek Reservoir, if designed and constructed for flood control purposes only and since they believe that its construction would be of immediate importance for the control of floods in the Kansas River Valley and through the greater Kansas City area, they urge that initial funds be appropriated immediately for the construction of this reservoir.

The Atchison, Topeka & Santa Fe Railway Co., by F. D. Kinnie, Chief Engineer; Chicago, Burlington & Quincy Railroad Co., by H. A. Clark, Chief Engineer; Wabash Railroad Co., by J. Borisfield, Chief Engineer; Gulf, Mobile & Ohio Railroad Co., by B. V. Bodie, Chief Engineer; Missouri Pacific Railroad Co., by W. H. Hobbs, Chief Engineer; Missouri-Kansas-Texas Railroad Co., by K. H. Hauger, Chief Engineer; The Kansas City Southern Railway Co., by A. N. Reece; St. Louis-San Francisco Railway Co., by E. S. Anderson, Chief Engineer; Union Pacific Railroad Co., by Wm. Behmis, Chief Engineer; Chicago, Milwaukee, St. Paul & Pacific Railroad Co., by W. G. Powers, Chief Engineer; Chicago, Rock Island & Pacific Railroad Co., by W. B. Throckmorton, Chief Engineer; Chicago Great Western Railway Co., by G. W. Johnson, Chief Engineer; Kansas City Terminal Railway Co., by F. J. Ackerman, Chief Engineer.

Senator SCHOEPPEL. Mr. Chairman, I do not know what is the desire of the chairman about hearing the rest of these witnesses.

Senator ELLENDER. I will stay with you as long as you remain, Senator.

Senator SCHOEPPEL. Thank you, sir.

I would like to call next the mayor of Kansas City, Mr. William E. Kemp.

Senator ELLENDER. You are anxious to get through, are you not?

Senator SCHOEPPEL. That is true, and if it meets with your approval to continue, we will certainly be appreciative of that fact.

Senator ELLENDER. Mayor, will you step forward, sir.

## STATEMENT OF WILLIAM E. KEMP, MAYOR, KANSAS CITY, MO.

### MISSOURI AND KANSAS RIVER FLOOD CONTROL PROGRAMS

Mr. KEMP. Mr. Chairman and gentlemen of the committee, my name is William E. Kemp, and I am mayor of Kansas City, Mo. I have been mayor since 1946 and apparently I am destined to remain so for another 3 years.

As mayor of the city having within its corporate limits some 465,000 people, and within 15 miles of our city hall some 850,000 people, I saw the lowlands of that metropolis flooded by the most disastrous flood the city has ever seen. And it was flooded because the recommendations of the engineers had not been put into effect.

I am advised that had the system of retention reserviors been completed on the upper reaches of the Kaw River, there would not have been a single drop of water overflow our levees in the metropolitan area.

That water came in and flooded the Argentine district, the Armourdale district, the central industrial district, and backed up and overflowed our newest Fairfax industrial district. That is down where there are these 12 railroads with all of their yards. Transportation was paralyzed.

Homes, of course, were completely destroyed. I won't say that they were completely destroyed, but they were so terribly damaged that I could hardly see how anyone would have the courage to go back to them. Those homes were down in the lowlands.

These great industries were flooded to the second and third floors of their buildings. The damage was almost beyond computation.

### COMPLETED FLOOD-CONTROL STUDIES

Now, this is an old story. In 1932, I believe, the National Resources Board was directed to make a study of the watersheds of the country and the question of the control of floods.

Since that time, as has been pointed out, Mr. Richard Fowler and associates, distinguished engineers from California, made a study and a report, and Tuttle Creek was one of the key points in that report for the protection of the Kaw Valley and the various cities along the route of the Kaw River. That was confirmed by the study of eight distinguished engineers of the Water Planning Committee of the National Resources Board.

It was further confirmed by our Army engineers.

Now, they talk about another study. I just want to suggest that I know of nothing that has been studied more thoroughly than the matter of flood protection in the Kaw and the Missouri River Basins. Yet they want some more studies.

TUTTLE CREEK DAM, KANSAS

Now, I have no objection to any more studies. That is all right. But all of these technical people have said that Tuttle Creek is an essential part of any flood-control plan. Regardless of what else they do, regardless of conservation measures—and I am for them—Tuttle Creek is still essential.

Now, you suggested the matter of opposition, Senator. I want to call attention to the fact—and I have experienced it as mayor of Kansas City—that there has never been suggested a single public improvement that has not met with opposition. We have just built a great traffic way right through our town. We met great opposition from some 200 people whose houses were going to be affected. But that opposition had to give way in the interest of the greater good to the greater number of people.

And so it is in the matter of the Blue Valley or Tuttle Creek. Of course, those people don't like it. If I was living there I wouldn't like it either.

But if we are going to control these disastrous floods, that reservoir is essential.

It seems to me that we have waited far too long and we have suffered damages that would have built every one of those reservoirs and paid for them. We suffered that damage just in 1 year. I think we should not be subjected to that constant threat of a flood every year. We have the threat again this year. We escaped it.

Omaha escaped it by just a hair's breadth as a result of the magnificent work of the engineers. Had it not been for that, the industrial area of Omaha would have been flooded and, of course, a large portion of the Missouri Valley and the upper stretches were flooded.

AMOUNT FOR CONSTRUCTION START

Now, in regard to the suggestions that we ought to wait until this Commission apointed by the President reports, I want to suggest that the President didn't think that because after he had appointed this Commission in his budget he recommended the sum of $15,500,000 as the start, the immediate start on Tuttle Creek. He had no thoughts of waiting on Tuttle Creek until this Commission reports.

That is not the function of this Commission, and the Chairman of the Commission said so just recently. I think that notion was eloquently voiced here this morning by Senator Hennings whose original idea was that we have a Commission to make this study. Senator Hennings had not thought of delaying the appropriation, the construction of Tuttle Creek until after this Commission reported.

I have no prepared statement to make because I just got word of this hearing while I was attending the national conference, or rather, the annual conference of mayors in New York.

Senator ELLENDER. We prefer to have these off-the-cuff statements anyhow, mayor.

Mr. KEMP. It seems to me that in the light of all of the careful studies that have been made and the facts that we know, and in view of the admitted necessity for the construction of this dam, if we are going to hold back the floodwaters that threaten us year after year, there should be no longer any delay. I want to appeal as strongly

as I may to this committee of the Senate, and then in turn to the Senate, that when you go to conference with the House you stand by us and do the best you can to come out of that conference committee with a report favorable to the inclusion of this $15,500,000 for Tuttle Creek and the beginning of construction work that will protect the whole Kaw Valley and Kansas City from this constant threat of disaster.

Senator ELLENDER. I want to say that I was in that conference and we stood by our recommendations as long as we could. But when it became apparent that the House would not give in, that was the only time we receded.

We practiced the same thing of just doing what was best for the most people. That rule works in many ways, you know.

Mr. KEMP. I realize that.

I want to express my appreciation for the attitude that some of the members of this committee have already expressed.

#### KANSAS CITY FLOOD-CONTROL RESOLUTION

May I, just for the record, read the resolution adopted by the city of Kansas City. The resolution states:

Whereas the disastrous Kansas River flood which descended upon Kansas City, Mo., on July 13, 1951, brought with it untold suffering and property loss and the further expenditure of many millions of dollars in rehabilitation of the stricken areas; and

Whereas it is the firm conviction of the people of Kansas City, Mo., that this disaster would not have occurred if the system of retention reservoirs had been constructed in accordance with the present existing plans which have been studied and restudied for almost two decades; and

Whereas the unit of the retention system which is of most value to the two Kansas Citys and the portion of the Kansas River Valley between Manhattan, Kans., and the mouth of the Kansas River is the proposed and already authorized Tuttle Creek Reservoir: Now, therefore, be it

*Resolved by the Council of Kansas City*, That it commend the President of the United States for recommending an immediate start of construction of the Tuttle Creek Reservoir and urge the Congress of the United States to make available by appropriation the $15,500,000 which the President has requested for this purpose in his budget message.

Authenticated as adopted this February 18, 1952.

Thank you, Mr. Chairman.

Senator SCHOEPPEL. Mr. Chairman, I would like next to call Mr. L. B. Smith, of Topeka, Kans.

Senator ELLENDER. All right, Mr. Smith.

## STATEMENT OF L. B. SMITH, WATER COMMISSIONER, TOPEKA, KANS.

#### TUTTLE CREEK DAM, KANS.

Mr. SMITH. Mr. Chairman, my name is Lloyd B. Smith, and I am water commissioner of Topeka, Kans.

Topeka, Kans., is a city of 100,000 metropolitan population, located on each bank of the Kansas River. A large part of its heavy industries, as well as many blocks of its residences, are in the flood plain.

On May 30, 1903, a major flood occurred in the river at Topeka, with disastrous results in the flooded area, after which local drainage dis-

tricts were formed, and by 1910 these districts had installed levees to protect property within the city limits. These levees, although primitive, prevented any major disaster until 1936.

Under the Flood Control Act of 1936, the United States Army installed a system of flood-control works on the right, or south, bank of the river. The project included similar protection for the north side of the river, but this has never been completed.

In 1938 Congress approved the Tuttle Creek Dam on the Blue River, a tributary of the Kansas River, some 60 miles above Topeka. At the request of the inhabitants in the area that would be submerged by the construction of the dam, Topeka assisted in defeating the appropriation for the construction of the dam in order to give more time for investigation to determine whether there was not some other method of preventing Topeka floods that would not require the submerging of so much land. Topeka assisted in deferring the appropriation for the construction of the dam for the next 8 years. The Army made various resurveys and reports during that time, but the conclusion was the same each time without exception. That was that the Tuttle Creek Dam would be more effective for flood protection, would submerge less tillable land, and cost less than any other method of retarding the water in the Blue River.

TOPEKA LEVEE SYSTEM

Since 1948 Topeka has never ceased to press for the completion of its levee system. The obvious answer has been that the local levees cannot be designed until the program of constructing detention dams is assured. Detention dams lower the flood crest, and this in turn calls for lower levees. After 14 years of this discussion, Topeka had an unprecedented flood in July 1951.

The water went over the top of the levees, which are from 35 feet to 40 feet high above the bed of the river. Even at that, the river channel carried less than one-half the flow. To protect the city from future flooding, all the water will have to be held in the channel between the levees. In place of the 35-foot levees we now have, they would have to be high enough to carry more than twice the amount of water. Such levees are impracticable if not impossible.

Our only hope now is to decrease the crest of the flow by detention dams for general protection, followed by levees to take care of the local situation. In our location the largest and most effective dam would be in the Blue River some 60 miles above Topeka. Topeka is therefore hoping for the appropriation for the Tuttle Creek Dam.

The conditions and the facts surrounding Topeka in the unprecedented flood of July 13, 1951, have been well advertised and are well known, so I will not go into those details at this time.

Senator ELLENDER. I saw some of it.

Mr. SMITH. We do recognize some things that we had not known before. One is that the people of Topeka are satisfied that it is too late to take care of the crest of a flood of that magnitude after it reaches Topeka and that something has to be done before it gets there.

Now, the only way to hold that water is to construct major dams up the river.

Now, the nearest such dam to Topeka would be Tuttle Creek Dam, which would be about 60 miles above Topeka. This would evidently help us a great deal.

I am also a civil engineer, and I have figured what effect this flood, if the water had been retained in the Blue River at the time of our flood, would have been. The major amount of the rainfall was not in the Blue River Valley. It was south of us. But the Blue River did have considerable water in it.

There were 102,000 second-feet which came down the Blue River at that time.

According to my calculations at our waterworks, which are 4 miles above Topeka, with the cross section that we have there, we would have had a level of water 3 feet lower if the water had been retained in the Blue River, and we would never have had to worry about anything happening to us.

But, as it was, we were so worried that we had 1,500 men there helping to protect our waterworks.

I might say that, in spite of the immense flood that we had in July of 1951 and in spite of the fact that some of our levees were overtopped, they were not damaged in any way, and they are just as good now as they were the day they were built.

I think that goes a long way toward confirming my idea that the engineers know what they are doing.

There were also established in 1936 control points along the river.

The engineers are so thoroughly familiar with the situation that 48 hours before the crest of the water came to Topeka they notified us that the crest would be around 37 feet.

Well, it was 36.4 feet, about a half foot short of the estimate.

Knowing the rainfall and knowing the conditions up the river, they could tell what the flood was going to be at any particular point a number of hours before the flood occurred.

Without going further into the details, I would like to submit here a resolution from the Topeka City Commission, a resolution from the Shawnee County Board of County Commissioners, a statement by W. K. Wilke and the mayor of Topeka, Kans.

Senator ELLENDER. All of these statements will be inserted in the record.

(The documents referred to follow:)

RESOLUTION

Whereas Topeka and Shawnee County, Kans., suffered a most disastrous flood from the Kansas River on July 13, 1951; and

Whereas the unprecedented flood of 1951 has demonstrated that dike protection cannot be depended upon to confine the flow in the Kansas River in a major flood: and

Whereas the only means available to protect Topeka and Shawnee County from the excess flow, is reduction of the flow by detention dams; and

Whereas Congress now has for consideration an item in the President's annual budget of $15½ million to be applied to the construction of Tuttle Creek Dam in the Blue River: Be it

*Resolved by the Board of County Commissioners of Shawnee County, Kans.*, That Congress be hereby respectfully petitioned to enact the legislation necessary to make available the funds to apply on the construction of Tuttle Creek Dam and that supplementary funds be provided for local flood protection works.

Passed by the Board of Commissioners this 4th day of February 1952.

Approved the 4th day of February 1952.

DEAN E. YINGLING.
ROBERT R. JONES.
PAUL MADDEN.
MYRON H. CUSHMAN.

Attest:

RESOLUTION

Whereas Topeka suffered a most disastrous flood from the Kansas River on July 13, 1951; and

Whereas flood protection was provided for Topeka in 1936 but has never been completed; and

Whereas the unprecedented flood of 1951 has demonstrated that local dike protection can be depended upon for less than half the flow in the Kansas River in a major flood; and

Whereas the only means available to protect Topeka from the excess flow is reduction of the flow by detention dams; and

Whereas Congress now has for consideration an item in the President's annual budget of $15½ million to be applied to the construction of Tuttle Creek Dam in the Blue River: Be it

*Resolved* by the Board of Commissioners of the City of Topeka, Kans., that Congress be hereby respectfully petitioned to enact the legislation necessary to make available the funds to apply on the construction of Tuttle Creek Dam and that supplementary funds be provided for local flood protection works.

Passed by the board of commissioners this 13th day of May 1952.

Approved 13th of May 1952.

W. KENNETH WILKE,
*Mayor.*
J. GLEN DAVIS,
*Commissioner of Finance.*
LLOYD B. SMITH,
*Commissioner of Water.*
HARRY C. SNYDER,
*Commissioner of Parks.*

Attest:

EDWIN R. JONES,
*City Clerk.*

[SEAL]

C. MADISON WILLIAMS,
*Commissioner of Streets.*

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STATEMENT BY W. KENNETH WILKE, MAYOR OF TOPEKA, KANS.

The July flood of 1951 on the Kansas River demonstrated more adequately than any and all words of description the devastating powers of this great unbridled stream.

Approximately 29,000 people were driven from their homes in Topeka; 8,000 of their homes were damaged or destroyed. Two major vehicular bridges, as well as two railroad bridges, serving three major railroad lines—viz, the Atchison, Topeka & Santa Fe, the Rock Island, and the Union Pacific—were destroyed. Direct damages to the peoples of this community and corporate businesses ran into millions of dollars, and indirect damages such as loss of earnings and the permanent closing of businesses, such as Morrell's Packing Co., having 1,400 employees, added additional millions in losses to the community.

The people of Topeka want and need flood protection and need as much protection as we can get as rapidly as it is possible to get it.

Topeka does not stand alone in this great need. Manhattan, Wamego, Marysville, upstream from our city, as well as Lawrence, Kansas City, and other towns downstream, are equally vitally concerned with the benefits that would be derived from the Tuttle Creek Dam.

Kansas City, as the hub of intercontinental transportation and the home of many manufacturing plants essential to the military might of our Nation, must be protected from floods as must be the rail lines through the Kansas River Valley. The defense industries located in Topeka fall in the same category.

I feel that it would be redundant to cite statistics as to engineering facts which have already been covered by the Army Corps of Engineers.

We of Topeka urge the appropriation now of funds for the immediate construction of Tuttle Creek Dam as a dry dam.

A small group of people from the Blue River Valley have made a loud noise protesting the construction of this dam. Dwight Payton, of Overbrook, Kans., population 420, situated on high ground outside of the Kansas River flood basin, is spearheading on agitation for watershed control in lieu of retention dams for

flood control. Admittedly this group has no workable plan at this time, but ask that just a little more time be devoted to study in the hopes of further delaying action on this project and by so doing defeat it.

What's just one more year of planning after waiting 15 years and then we can be sure the action taken will be right.

They criticize and censor the planning of the Army engineers severely who do have a plan which can be commenced immediately and which will provide some flood protection at the earliest possible date.

Surely after nearly 15 years of planning no better plan having been devised and another major flood, it is now time for action, not talk.

As proponents of the retention dams we don't contend that they are the sole solution to the flood control. We do say however that every drop that is held back in times of unusually high stream levels by retention dams the less water there will be coming downstream. Had Tuttle Creek Dam been in operation in July 1951 the river level at Topeka would have been approximately 2½ feet lower than it was.

Soil erosion and watershed control has its place in the over-all flood control program and we have no objection to such measures being taken as supplemental to the retention dams. We do, however, strenuously object to watershed control as the sole means of flood control.

It would appear that the greatest good to the greatest number of persons and exceedingly more valuable properties lying below the proposed dam would prove need enough for this dam.

The construction of Tuttle Creek Dam as a dry dam would provide slightly more than 2,000,000-acre feet of reservoir, which would have to be flooded only about 1 out of 7 years to prevent major flooding downstream. The owners of the property to be flooded would be compensated for their land and would be able to lease it from the Government and farm it as they are now doing. Thus in one sense of the word this would permit the people living in the Blue River Valley to have their cake and eat it too.

Flood losses downstream on the other hand, are not compensable. Repeated billion-dollar losses along the Kansas River Valley will wreck the economy of a large area in the heart of our great country and weaken our national defense efforts. Certainly the inconvenience of a few is justified for the welfare of many.

Senator SCHOEPPEL. I would like to next call on Mr. William G. Calvert, who is president of District No. 5 of the Missouri-Arkansas Basin Food Control Association, who will speak for the State of Missouri.

Senator ELLENDER. All right, Mr. Calvert, step forward, please.

## STATEMENT OF WILLIAM G. CALVERT, PRESIDENT, DISTRICT NO. 5, MISSOURI-ARKANSAS BASIN FLOOD CONTROL ASSOCIATION

TUTTLE CREEK DAM, KANS.

Mr. CALVERT. Mr. Chairman and gentlemen of the committee, my name is William G. Calvert. I am president of District No. 5 of the Missouri-Arkansas Basin Flood Control Association.

The disastrous flood of 1951 focused our attention on the lack of flood protection on the Kansas River, and the terrible losses that this lack of protection inflicted upon the cities and the agricultural lands of Missouri. Now again in 1952, Missouri suffers tragic losses, and, again the waters came from out the State—from the upper Missouri River Basin. Currently all our levees are breached, and we are awaiting the normal June rises without any protection.

For many years local thought and opinion in Missouri has been concerned with local flood problems. Year in and year out the crests have come from up stream and we have built higher levees and had them overtopped. In the last 10 years there have been six floods—

1943, 1944, 1945, 1947, and finally the disastrous years 1951 and 1952.

It would be useless to recount to you again the ravages of these floods, the personal agony of ruined homesteads, the personal financial losses, the loss of taxes to city, county, and Federal Governments, the destruction of local roads and bridges with disrupted school bus service and transportation. You have seen the pictures, seen the figures of losses and personally visited many of the flooded areas. You have generously help rebuild our levees, roads and homes, yet the crests keep rolling in from upstream, 6 years out of the past 10.

Those of us who live in the State of Missouri have been forced to change our outlook on the floods. No longer can we concern ourselves with purely local effects of high water, because history has shown us that our destinies are shaped upstream on the Missouri River and on the Kansas River.

We have watched with great interest the vast program of reservoirs and conservation projects now underway and partially completed on the upper Missouri River. This year's flood of 1952 shows how urgently we need to expedite these upstream reservoirs for flood-water storage.

The Kansas River and its tributaries are still without control or regulation of any sort, and 1951 demonstrated the effect of the Kaw on Missouri River flood crests. We in Missouri, desperately need reservoirs on the Kaw and its tributaries to hold the flood crests in check near their sources. Tuttle Creek Dam, Perry and Milford Dams have been repeatedly recommended by both private engineering authorities and the Corps of Engineers, as the most effective and economical reservoirs to construct first. Congress recognized this and authorized Tuttle Creek Dam in 1938. Nothing has changed the engineering opinions then advanced in favor of Tuttle Creek Dam. Its immediate construction could have no effect—other than good—on any plan which might be advanced by the President's Missouri Basin Survey Commission.

APPROPRIATIONS URGED

The associations in the State of Missouri join with the Missouri-Arkansas Basins Flood Control Association in respectfully urging that immediate appropriations be made, as recommended in the 1953 budget, for funds for Tuttle Creek Dam, for flood-control projects on the Kansas rivers, and for approval of funds for reservoirs and flood-control projects on the upper Missouri River.

I would appreciate the opportunity of filing with this committee a written statement of these remarks for the record. Attached are endorsements of this program, submitted by 47 local service clubs, county courts, civic bodies, city officials, levee boards, and interested townspeople, as well as by the paid memberships in the various flood-protective associations. These show the breadth of local support for the program as presented. We have the approval of all civic groups, all civic governing bodies, all levee boards and a majority of landowners and tenants—expressed by paid membership in flood-control associations.

Mr. CALVERT. Attached to my statement is a list of resolutions, all of which are on file in my office, showing unanimous support for Tuttle Creek as authorized, resolutions passed by all organized bodies

in the State of Missouri along the river. That is, we have not taken a list of names of farmers from the courthouse. We have gotten the organized groups such as the levee districts, the county courts, the road boards, the school boards, and others along the entire length of the river in Missouri.

Also, I would like to call your attention to a statement from Gov. Forrest Smith, of the State of Missouri, which I would like to quote:

> Regardless of any other details, I am convinced that Tuttle Creek Reservoir is vital to any effective flood control program affecting Kansas City and the Missouri River below Kansas City, and urge appropriations for its immediate construction.

Gentlemen, we are presenting a uniform program. We may fuss about which levee we would like to build next, but for Tuttle Creek we are all in favor.

Thank you.

Senator ELLENDER. Thank you, sir.

(The document submitted follows:)

RESOLUTIONS SUBMITTED FOR STATE OF MISSOURI

Governor Smith, State of Missouri.
Missouri River Flood Protective Association, Kansas City to Grand River.
Board of Trustees, Levasy, Mo.
Norborne Commercial Club, Norborne, Mo.
Mayor and Council of Henrietta, Mo.
Saline County Court of Saline County, Mo.
City Council of the City of Marshall, Mo.
Richmond Chamber of Commerce, Richmond, Mo.
County Court of Ray County, Richmond, Mo.
Kiwanis Club of Richmond, Richmond, Mo.
Richmond Rotary Club of Richmond, Richmond, Mo.
Lions Club of Orrick, Orrick, Mo.
Liberty Rotary Club of Liberty, Mo.
Lions Club of Liberty, Mo.
City Council of Liberty, Mo.
City of Missouri City, Mo.
Jackson County Chamber of Commerce, Jackson County, Mo.
Lions Club of Napoleon, Mo.
Mayor of Napoleon, Mo.
Endorsement by 22 merchants of Liberty, Mo.
Blackwater-Lamine Flood Control Association
Membership and Association Data-Missouri River Flood Protection Association
Lexington Rotary Club of Lexington, Mo.
Lexington Lions Club of Lexington, Mo.
Lexington Chamber of Commerce, Lexington, Mo.
County Court of Howard County, Mo.
Pomeroy Bend Levee District of Platte County, Mo.
County Court of Cooper County, Mo.
County Court of Cole County, Mo.
Chamber of Commerce of Boonville, Mo.
The Missouri River Flood Protection Association, Grand to Osage Rivers
City of Glasgow, Mo.
County Court, County of Johnson, Warrensburg, Mo.
Chamber of Commerce of Warrensburg, Mo.
City of Brunswick, Mo.
City Council of Mendon, Mo.
Whitham Levee District, Mendon, Mo.
Farmers Co-operative Association, Brunswick, Mo.
Garden of Eden drainage district, Chariton County, Mo.
City of Sumner, Mo.
Lions Club of Brunswick, Mo.
City Council of Brunswick, Mo.

**Brunswick levee district No. 1**
**County Court of Chariton County, Mo.**
**Marshall Chamber of Commerce, Marshall, Mo.**
**Jefferson City Chamber of Commerce, Jefferson City, Mo.**
**Lower Missouri River Flood Control Association**

Senator SCHOEPPEL. I would like next to call Mr. Victor Remley, of Liberty, Mo., who is representing district No. 5 of the Missouri-Arkansas Basin Flood Control Association.

Senator ELLENDER. All right, Mr. Remley.

## STATEMENT OF VICTOR REMLEY, LIBERTY, MO., REPRESENTING DISTRICT NO. 5, MISSOURI-ARKANSAS BASIN FLOOD CONTROL ASSOCIATION

MISSOURI RIVER FLOOD CONTROL

Mr. REMLEY. Mr. Chairman, I hate to impose upon your time; I have not come here to make a speech. I am in a rather embarrassing position. I have listened to what has transpired, and in view of your statement that you like to have off-the-cuff statements, I would like to speak for a couple of minutes.

I want to address myself to the chairman of the committee and to the members of the Appropriations Committee of the United States Senate.

For years I have had high regard for the members of the national Congress. I am sensitive to the fact that they are on busy schedules and have heavy responsibilities imposed upon them. I can well imagine the magnitude of the problems which the members of the Committee on Appropriations are confronted with.

I am just a dirt farmer. I am not a speechmaker. I love to farm. I have no desire to leave it.

Incidentally, I have never attempted to make a speech before in my life. But I am a flood sufferer as a dirt farmer below Kansas City.

I might add, in order to identify myself, that my father was born on a Missouri farm within a mile of the Missouri River. While quite young his mother was left a widow. He taught school and cradled wheat in order to send himself to the University of Missouri. He attended that school first in 1876. I am one of a family of seven boys, all living, ranging from the age of 78 to 41. Their wives are all living and altogether there are represented three generations covering 100 years. There has never been a divorce, an arrest, nor has there been a member on relief.

As I said, I am not a speech maker. Maybe there are such things as virgin speeches, but I am not a virgin.

But regardless of how this performance may be cataloged, I assure you that it is made from the heart and in all sincerity, all honesty, and in dead earnest.

I assume I have identified myself sufficiently well to say that I am in large portion a country hoosier, not a lawyer, not an engineer, and there are a lot of things about flood control that I do not know.

But I do know that 35 years ago when I was in high school we were required to make a limited study of some rather interesting characters. One of those characters was Socrates, and if my memory serves me right, as a result of an incident that occurred in his household in-

volving his wife we have a philosophy handed down to this day that most of us believe in.

The wife of Socrates more or less ruled the roost and on one occasion while giving Socrates a tongue lashing she threw water in his face, after which he said and made the simple statement that "After the thunder comes the rain."

Now, I do not know how much thunder we have had or what the rainfall has been, but I do know that on the lower Missouri River we have had an excessive amount of water in recent years.

I refer to a 150-acre farm in the Missouri bottoms about 25 miles below Kansas City, one of the best farms that I know of in the bottoms.

RECURRENCE OF FLOODS

It has produced potatoes on every acre. The owner in recent years refused $400 per acre for the farm. In former years it was never considered to be subject to the flood hazard from the Missouri River. But in the last 9 years, 1943 to 1952, he has had all or part of his land flooded in six different years.

I referred to another farm of 325 acres in the Missouri River bottoms. In 1937 the owner produced 11,000 bags of potatoes on less than 50 acres. Bear in mind that 10,000 bags of potatoes produced on 50 acres is 333⅓ bushels per acre. So the 11,000 bags would be in excess of that figure of 333⅓. It has produced corn, wheat, and alfalfa as well as other products. Today it is abandoned except for permanent pasture.

I merely mention these farms and say that they are no different from a thousand other farms on the main stem of the Missouri River below Kansas City. I point out that due to progress and the change of times and conditions we are faced with a hazard beyond our control. I say that it is a problem of great national importance.

I will eliminate the production line that is taken care of by obstetricians and will say that with the exception of agriculture we have had a strike in every line of production in this country. If we had a strike in agriculture it would not take but 10 percent of the surplus producing farms to make the strike effective. But should a strike come, we would really have rationing and black marketing. In the face of the continuing floods in the fertile valleys of the Missouri Basin we would have rationing and black markets for our foodstuffs will come from other countries.

FLOOD-CONTROL BENEFITS

I fully realize that never in the history of this country has Uncle Sam ever produced a single dime. All of the money that comes in to the Federal Treasury is in the form of taxes. The expenditure of those funds should be carefully guided.

I say that the effects of these floods are far-reaching. They affect every line of industry in a wide territory. It makes no difference whether you are selling picture-show tickets or shoestrings or tombstones. In turn floods affect large industries and result in unemployment which, in turn, is reflected in the national economy.

I have never in my life known of a flood-prevention program that was properly engineered, constructed with common sense, properly

supervised and maintained, that has not paid dividends. I make the statement that the same applies to big creeks as well as the little creeks and will apply to the Missouri River and its tributaries.

We spend money in every foreign country in the world and a large portion for good will, but we cannot live on good will alone any more than the farmers in the Missouri River bottoms can survive on sand and river water.

In all honesty and sincerity I sincerely ask that the problem of flood control in the Missouri River Basin be given honest and sincere consideration toward an end to the devastating floods in the Missouri Valley. In so doing, it is my belief that we will be making an investment of the portion of the tax dollar that will pay Uncle Sam a dividend, and at the same time it will be a trend toward making this country great in every sense of the word.

Mr. Chairman, I sincerely thank you for your time that I have consumed and for an honest and fair consideration of what I consider to be an urgent problem.

Chairman McKellar. Will the gentleman yield to me for a question? When I came in I thought I heard him say that he was one of nine brothers.

Mr. Remley. One of seven brothers.

Chairman McKellar. I just wanted to inquire whether the others are also tall, strong, and almost massive?

Mr. Remley. I am one of a set of twins.

Chairman McKellar. He makes a distinguished witness and is quite handsome.

Chairman McKellar. Will you call your next witness?

Senator Schoeppel. Thank you, Mr. Remley.

I want to call next Mr. Christian Stipp, of Carrolton, Mo. By the way, he is a member of the Legislature of the State of Missouri, I understand.

Chairman McKellar. Will you come around, sir?

## STATEMENT OF CHRISTIAN STIPP, CARROLTON, MO.

### TUTTLE CREEK DAM, KANS.

Mr. Stipp. May I have just a moment, Mr. Chairman?

My home is farther downstream on the Missouri River than any of the other representatives here. My problem is simply the accumulation of all of these other problems.

My testimony would simply be a similar accumulation. So let me say to you that my people want Tuttle Creek, and they want it now. Thank you very much.

Chairman McKellar. Thank you, sir.

Who is your next witness?

Senator Schoeppel. Our next witness is Mr. Kirk McFarland, who is president of the Missouri-Arkansas Basin Flood Control Association. Mr. McFarland, please.

Chairman McKellar. Will you come around, sir.

## STATEMENT OF KIRK McFARLAND, PRESIDENT, MISSOURI-ARKANSAS BASIN FLOOD CONTROL ASSOCIATION

### MISSOURI-KANSAS-ARKANSAS RIVER FLOOD-CONTROL ASSOCIATION

Mr. McFARLAND. Mr. Chairman and gentlemen of the committee, the flood-control association which I have the honor of representing here, is composed of 22 units. Each unit is a local flood-control association. These flood-control units blanket the Missouri River from South Dakota to the mouth near St. Louis. They also include the Kansas River in its entirety and the Arkansas River in its course through Kansas.

Nearly all of the gentlemen who have appeared before you this morning are members of this association with one or two exceptions and with the exceptions of the Members of Congress.

We, as an organization are, of course, for flood control; but I want to emphasize that we are flood control only. We have no interest in any other phase of river control or water development. Neither do we have a plan to offer you for flood control other than the plan that was inaugurated by Congress quite a number of years ago when it started out on this program of building dams on the upper reaches of the river and levees on the lower stretches for the protection of the productive farm lands that lie in the valleys.

That is the only plan for flood control that we have. It is the continuation of the same plan that has been in existence for years. We don't care by what name the plan is called. That is entirely immaterial to us. We don't care whether the dams are dry dams or wet dams. All we care about is that they hold back the floods that continually sweep down out of the hills and knock us off our feet.

It is not necessary to say that the job is too big for us to tackle alone. We can't do it. So we come here before you to ask only that you continue the present plan that was inaugurated by the Congress a number of years ago. We think it is a good plan, and we know that it is the only plan that offers us any hope of any early relief.

The Missouri-Arkansas Basins Flood Control Association consists of a group of 22 local flood control associations located in the five States of South Dakota, Iowa, Nebraska, Kansas, and Missouri drained by the Missouri and Arkansas Rivers. The local groups have a total membership of approximately 10,000 individuals.

The association had its beginning on July 25, 1951, immediately after the disastrous flood. This meeting was attended by approximately 3,000 people who decided that everything possible should be done to obtain adequate flood control. Numerous people in this meeting were already members of various flood-control organizations who, in the past, had been rather unsuccessful in the obtaining of their objectives. Since the problem involved was of such a large and over-all nature they decided that an over-all organization would be desirable. The Missouri-Arkansas Basins Flood Control Association was then organized.

### RESOLUTIONS ADOPTED

A copy of the resolutions adopted at the September 21 and 22, 1951, meeting of the association is attached. It will be noted that these

resolutions urge action at the earliest possible date, which logically means that adequate appropriations should be made at once for projects that are already planned and authorized. Among such projects would be Tuttle Creek, Toronto, Strawn and Glen Elder Reservoirs in Kansas and Gavins Point and Oahe Reservoirs in South Dakota.

FLOOD LOSS

The flood of 1951, with its direct loss of approximately $1,000,000,000 and a total loss including indirect losses of approximately $2,000,000,000, created a terrific demand from the public for protection as quickly as possible. This clamor for aid has been accentuated by the recent Missouri River flood with its estimated direct losses of approximately $300,000,000.

This great demand for relief in the form of permanent works is shown by the resolutions, statements, and letters of which this association has copies. Rather than burden the committee with these we are attaching a list of the organizations, municipal bodies, and other groups that have passed them. There are 233 of them, and no doubt there are numerous others of which we have no record. They all make the same plea and that is: "Give us flood control as soon as possible."

COMMUNICATIONS SUBMITTED

The following list of resolutions, statements, and letters have been submitted to the Missouri-Arkansas Basins Flood Control Association by organizations, municipal bodies, and individuals urging immediate flood control. The original signed copies are available in our files.

Chamber of Commerce of Topeka, Kans.
Board of Commissioners of the City of Topeka, Kans.
Board of County Commissioners of Shawnee County, Kans.
District No. 12 of Missouri-Arkansas Basins Flood Control Association.
Northeast Topeka civic group.
Statement of Gov. Edward Arn, Governor of Kansas.
District No. 14 of Missouri-Arkansas Basins Flood Control Association.
Geary County Flood Control Association.
Upper Kansas Flood Control Association.
Kansas State Chamber of Commerce (the following chambers of commerce and organizations support the Kansas State Chamber of Commerce water-management policy in full):
- Chamber of Commerce of Arkansas City, Kans.
- Chamber of Commerce of Coffeyville, Kans.
- Chamber of Commerce of Independence, Kans.
- Chamber of Commerce of Junction City, Kans.
- Chamber of Commerce of Kinsley, Kans.
- Chamber of Commerce of Marion, Kans.
- Chamber of Commerce of Neodesha, Kans.
- Chamber of Commerce of Oswego, Kans.
- Chamber of Commerce of Parsons, Kans.
- Chamber of Commerce of Pratt, Kans.
- Chamber of Commerce of Salina, Kans.
- Chamber of Commerce of Chanute, Kans.
- Chamber of Commerce of Hoisington, Kans.
- Chamber of Commerce of Iola, Kans.
- Chamber of Commerce of Kansas City, Kans.
- Chamber of Commerce of Lawrence, Kans.
- Chamber of Commerce of Meade, Kans.
- Chamber of Commerce of Newton, Kans.
- Chamber of Commerce of Ottawa, Kans.

Chamber of Commerce of Pittsburg, Kans.
Chamber of Commerce of Russell, Kans.
Chamber of Commerce of Winfield, Kans.
Chamber of Commerce of Topeka, Kans.
Rotary Club of Oswego, Kans.
District No. 13 of Missouri-Arkansas Basins Flood Control Association.
County Commissioners of Douglas County, Kans.
Douglas County Kaw drainage district.
Chamber of Commerce of Lawrence, Kans.
City of Edwardsville, Kans.
City of Bonner Springs, Kans.
Eleventh district of Missouri-Arkansas Basins Flood Control Association.
Kansas Rod and Gun Club.
Lake of the Forest Club, Edwardsville, Kans.
Board of City Commissioners of the City of Kansas City, Kans.
Editorial from the Topeka State Journal entitled "Let's Try Flood Control."
District No. 7 of Missouri-Arkansas Basins Flood Control Association.
Chamber of Commerce of Jefferson City, Mo.
Statement of Gov. Forrest Smith, Governor of Missouri.
"Why Tuttle Creek Should Be Built Now" by Willard J. Breidenthal, chairman, Flood Protection Planning Committee for Greater Kansas City.
Railroad Engineers' Committee on Flood Control, representing the following railroads in the Kansas City area:
The Atchinson, Topeka & Santa Fe Railway Co.
Chicago, Burlington & Quincy Railway Co.
Wabash Railroad Co.
Gulf, Mobile & Ohio Railroad Co.
Missouri-Pacific Railroad Co.
Missouri-Kansas-Texas Railroad Co.
Kansas City Southern Railway Co.
St. Louis-San Francisco Railway Co.
Union Pacific Railroad Co.
Chicago, Milwaukee, St. Paul & Pacific Railroad Co.
Chicago, Rock Island & Pacific Railroad Co.
Chicago, Great Western Railway Co.
Kansas City Terminal Railway Co.
Council of Kansas City, Mo.
Chamber of Commerce of Kansas City, Mo.
Central Industrial District Association.
Mississippi Valley Association.
City of North Topeka, Kans.
Board of City Commissioners, City of Manhattan, Kans.
District No. 19 of Missouri-Arkansas Basins Flood Control Association.
National Retail Grocers Secretaries Association.
Missouri River States Committee.
Kansas Society of Professional Engineers, eastern chapter.
Kansas Press Association, Sixtieth annual convention.
Wyandotte Post No. 83 of American Legion, Kansas City, Kans.
Kiwanis Club of Kansas City, Kans.
Wolcott drainage district.
Wyandotte County Commissioners, Wyandotte County, Kans.
Greater Kansas City Council of Mississippi Valley Association.
Fairfax Industrial Association.
Armourdale Activities Association.
Business and Professional Women's Club of Kansas City, Kans.
Flood Protection Planning Committee for Greater Kansas City, by A. N. Reece, vice chairman and railroad representative.
Flood Protection Planning Committee for Greater Kansas City, by John Gage.
City of Abilene, Abilene, Kans.
City of Glasco, Glasco, Kans.
City of Simpson, Simpson, Kans.
The Solomon National Bank, Solomon, Kans.
Chamber of Commerce of Glasco, Kans.
District No. 22 of Missouri-Arkansas Basins Flood Control Association, statement by George A. Fox, vice president.
Council Grove, Kans., E. T. Jacobs, mayor.

Board of County Commissioners of Neosho County, Kans.
Board of City Commissioners of the City of Chanute, Kans.
City Council, Erie, Kans.
City Council, St. Paul, Kans.
Chamber of Commerce of Chanute, Kans.
Junior Chamber of Commerce of Chanute, Kans.
Kiwanis Club of Chanute, Kans.
Lions Club of Chanute, Kans.
Rotary Club of Chanute, Kans.
Business and Professional Women's Club of Chanute, Kans.
Chamber of Commerce of Erie, Kans.
Trusler Behymer Grain Co., Emporia, Kans.
Anderson Cattle Co., Inc., Emporia, Kans.
Coolidge Implement Co., Inc., Emporia, Kans.
City of Neosho Falls, Neosho Falls, Kans.
Township of Neosho Falls, Neosho Falls, Kans.
Cemetery Board of Neosho Falls, Neosho Falls, Kans.
Lake View drainage district, LeRoy, Coffey County, Kans.
Lions Club of LeRoy, Coffey County, Kans.
Township Board of LeRoy Township, Coffey County, Kans.
Township Board of Spring Creek, Coffey County, Kans.
Township Board of Neosho Township, Coffey County, Kans.
Governing Body of the City of LeRoy, Kans.
Chamber of Commerce of LeRoy, Kans.
Board of County Commissioners, Marion County, Kans.
Cottonwood Valley Drainage Board, Marion, Kans.
Chamber of Commerce of Marion, Kans.
Cottonwood Valley Flood Control Association, Marion, Kans.
City Council of Florence, Kans.
Chamber of Commerce of Florence, Kans.
City Federation of Women's Clubs, Florence, Kans.
Rotary Club of Florence, Kans.
City Council of the City of Council Grove, Kans.
Kiwanis Club, Council Grove, Kans.
Veterans of Foreign Wars, Council Grove, Kans.
Chamber of Commerce of Council Grove, Kans
Board of County Commissioners of Morris County, Kans.
Frederick Phillips Post, No. 121, American Legion, Council Grove, Kans.
Lions Club, McCune, Kans.
Chamber of Commerce of Strong City, Kans.
City Council, Strong City, Kans.
City Council, Elmdale, Kans.
Board of County Commissioners of Allen County, Kans.
City Commission of the City of Iola, Kans.
City Council, city of Humboldt, Kans.
Chamber of Commerce of Iola, Kans.
Chamber of Commerce of Humboldt, Kans.
Rotary Club of Iola, Kans.
Rotary Club, Humboldt, Kans.
Kiwanis Club, Iola, Kans.
Lions Club, Iola, Kans.
Lions Club, Humboldt, Kans.
Chamber of Commerce of Chetopa, Kans.
City of Chetopa, Chetopa, Kans.
Lions Club, Iola, Kans.
Chamber of Commerce, Oswego, Kans.
City of Oswego, Oswego, Kans.
Rotary Club, Oswego, Kans.
District No. 23 of Missouri-Arkansas Basins Flood Control Association, statement by Glenn H. Beal of Fredonia, Kans.
City Commission of Fredonia, Kans.
City Commission of Neodesha, Kans.
City Commision of Independence, Kans.
City Commission of Coffeyville, Kans.
Chamber of Commerce of Fredonia, Kans.
Chamber of Commerce of North Kansas City, Mo.

Arkansas-Kansas-Oklahoma Inter-State Flood Control Commission.
City of Independence, Kans., Emmett E. Wilson, mayor.
City of Coffeyville, Kans., Richard L. Becker, state senator.
District No. 20 of Missouri-Arkansas Basins Flood Control, George Hetzel, Kinsley, Kans.
City council of Sterling, Kans.
Valley Township, Lyons County, Kans.
Alden Kansas Flood Control Association.
Board of County Commissioners, Lyons County, Kans.
Chamber of Comerce of Sterling, Kans.
Farm Bureau Board, Lyons County, Kans.
City of Great Bend, Kans.
City of Larned, Kans.
County Commissioners, Pawnee County, Larned, Kans.
Kinsley Kansas Chamber of Commerce.
Rotary Club, Kinsley, Kans.
City Commissioners, Kinsley, Kans.
Coon Creek Flood Control Association, Kinsley, Kans.
Chamber of Commerce of Dodge City, Kans.
City Commissioners, Dodge City, Kans.
County Commissioners, Ford County, Dodge City, Kans.
Chamber of Commerce of Garden City, Kans.
City Commisioners, Garden City, Kans.
County Commissioners, Finney County, Garden City, Kans.
Missouri River Flood Protection Association, Kansas City to Grand River.
Board of Trustees, Levasy, Mo.
Norborne Commercial Club, Norborne, Mo.
Mayor and Council of Henrietta, Mo.
Saline County Court of Saline County, Mo.
City Council of the City of Marshall, Mo.
Richmond Chamber of Commerce, Richmond, Mo.
County Court of Ray County, Richmond, Mo.
Kiwanis Club of Richmond, Mo.
Richmond Rotary Club, Rchmond, Mo.
Lions Club of Orrick, Mo.
Liberty Club, Liberty, Mo.
Lions Club of Liberty, Mo.
City Council of Liberty, Mo.
City of Missouri City, Mo.
Jackson County Chamber of Commerce, Jackson County, Mo.
Lions Club of Napoleon, Mo.
Mayor of Napoleon, Mo.
Endorsement by 22 merchants of Liberty, Mo.
Blackwater-Lamine Flood Control Association.
Membership and association data, Missouri River Flood Protection Association.
Lexington Rotary Club, Lexington, Mo.
Lexington Lions Club, Lexington, Mo.
Lexington Chamber of Commerce, Lexington, Mo.
County Court of Howard County, Mo.
Pomeroy Bend levee district, Platte County, Mo.
County Court of Cooper County, Mo.
County Court of Cole County, Mo.
Chamber of Commerce of Boonville, Mo.
The Missouri River Flood Protection Association, Grand to Osage Rivers.
City of Glasgow, Mo.
County Court, County of Johnson, Warrensburg, Mo.
Chamber of Commerce of Warrensburg, Mo.
City of Brunswick, Mo.
City Council of Mendon, Mo.
Whitham levee district, Mendon, Mo.
Farmers Cooperative Association, Brunswick, Mo.
Garden of Eden drainage district, Charlton County, Mo.
City of Sumner, Mo.
Lions Club of Brunswick, Mo.
City Council of Brunswick, Mo.
Brunswick levee district No. 1.

County Court of Chariton County, Mo.
Chamber of Commerce of Marshall, Mo.
Chamber of Commerce of Jefferson City, Mo.
Lower Missouri River Flood Control Association.

In the past there have been reports made in regard to the stand taken by various organizations and newspapers in the State of Kansas. These statements indicating that these various groups are opposed in general to large dams and in some cases specifically to Tuttle Creek, Toronto, and Strawn Dams. We have checked with the following organizations in an effort to get their true stand, and the following are statements and facts in regard to their exact position involving water and soil-resources policies:

NEWSPAPERS

*Emporia Gazette, Emporia, Kans.*—Lamar Phillips, of Ottawa, Kans., wrote to W. L. White, of the Emporia Gazette, requesting information as to what stand they have taken in regard to flood control. His reply was, "I have taken no firm position but in general have expressed a preference for the 'dry dam' type of flood control."

*Topeka Daily Capital, Topeka, Kans.*—Mr. Blake, of the Capital, wired Congressman Scrivner that the Topeka Capital was not only not opposing the appropriation for Tuttle Creek Dam but were in favor of an appropriation.

*Lawrence Daily Journal-World, Lawrence, Kans.*—The following is quoted from a letter from Dolph Simons, of the Journal-World, to Congressman Errett P. Scrivner. "As far as I know, the Journal-World has never expressed opposition to Tuttle Creek but has urged authorities to consider all forms of flood control rather than going overboard on any one single plan."

*Wichita Eagle, Wichita, Kans.*—The following is quoted from L. F. Kimmel's note to Noel T. Tweet. Kimmel is editor of the Eagle. "We are not against Tuttle Creek Dam as such but against big dams standing alone. Our position is soil conservation and retention of as much water as possible where it falls and then construction of such reservoirs and other apparatus as may be necessary to stop floods."

ORGANIZATIONS

*Kansas Council of Churches.*—Milton R. Vogel, executive director, wrote the following to Noel T. Tweet when asked if the council of churches opposed the construction of Tuttle Creek Dam: "As I have stated before, the Kansas Council of Churches has taken no action on any particular policy or plan of flood control. As the Kansas Council of Churches being listed as a State organization opposed to Tuttle Creek Dam, this is somewhat ambiguous."

*Kansas Association of Soil Conservation Districts.*—The following wire sent to Congressman Scrivner on March 12, 1952, from Emil Heck, president of the association: "The Kansas Association of Soil Conservation Districts has not taken a position opposing the appropriation for Tuttle Creek Dam."

*Associated Industries of Kansas.*—The following wire sent to Congressman Scrivner on March 12, 1952, from Gerald Gordon, secretary-manager: "Associated Industries of Kansas has taken no official action on flood control."

*Kansas Council of Engineers and Architects.*—The following is quoted from a letter from C. Y. Thomas, president, to Noel T. Tweet regarding their stand on flood control: "The Kansas Council of Engineers and Architects, which is composed of representatives of the various State-wide engineering organizations, has never met to consider any flood-control program. I have recently attended the annual meetings of the Kansas Engineering Society and the Kansas Society of Professional Engineers, and at neither meeting was an endorsement provided for any flood-control program."

We have all of this authentic information in our file.

RESOLUTIONS OF THE MISSOURI-ARKANSAS BASINS FLOOD CONTROL ASSOCIATION

(Adopted at the Kansas City meeting of September 21 and 22, 1951)

"Whereas no nation in the world is rich enough to afford the flood loss in human life and property suffered in 1951 in the Missouri-Arkansas River Basins; and

"Whereas we, the resolutions committee of the Missouri-Arkansas Basins Flood Control Association, duly organized and formed in Kansas City, Mo., on Friday, September 21, 1951, firmly believe that the tragedy of the floods of 1951 must never be repeated: Now, therefore, in order to prevent a recurrence of the flood catastrophe, be it

"*Resolved*, That the people of the Missouri-Arkansas River Basins have joined together in this organization to resolve their respective localized problems and to present a united front before legislative bodies; be it

"*Resolved*, That the people of the Missouri-Arkansas River Basins demand Federal appropriations to carry out the orderly and prompt completion of the authorized and recommended, coordinated, and comprehensive flood-control plans. It is further recommended that immediate appropriations should include funds sufficient to (1) start construction of the Tuttle Creek Reservoir, (2) start construction on Gavins Point Dam, (3) assure the continuance of work on the Oahe Dam and all other dams now under construction, and (4) insure immediate inauguration of work on dams not under construction, which include important flood-control features. It is further

"*Resolved*, That adequate funds should be made available annually to the Corps of Army Engineers for surveys and planning on authorized projects and flood-hazard streams in the Missouri and Arkansas Basins as such surveys furnish necessary information for intelligent action. It is further

"*Resolved*, That there should be an immediate start on the authorized flood-control projects in the Missouri and Arkansas River Basins.

"*Resolved*, That authorization of all recommended flood-control projects not already authorized be forthcoming immediately, so all projects in the Missouri and Arkansas River Basins will be in readiness for appropriations and construction.

"*Resolved*, That the recommendations of the Governor of Missouri and of the department of resources and development, with coordinating agencies as shown by their survey, respecting the Kaysinger Dam on the Osage River be given further consideration.

"*Resolved*, That the people of the Missouri and Arkansas River Basins hereby commend the great work being done by the soil-conservation districts, the State extension service, and the work by the Soil Conservation Service of the United States Department of Agriculture. We believe that this work is a very worthy and necessary soil-management practice and is supplemental to, but not a substitute for, flood-control reservoirs and levees.

"*Resolved*, That we believe that the management of the leased land in the reservoir and flood-plain area owned by the Government should be in accordance with recommendations made by the Soil Conservation Service and should be carried out under its supervision.

"*Resolved*, That the Senate of the United States be commended for approving appropriations for authorized flood-control projects for Tuttle Creek Dam, Toronto Dam, Strawn Dam, and Wichita and Hutchinson, Kans., protective works and that the House of Representatives should concur in these appropriations.

"*Resolved*, That appropriations be authorized for the continued construction and completion of agricultural levees and that previously authorized funds be immediately released in order to expedite construction of agricultural levees.

"*Resolved*, That the people of the Missouri and Arkansas River Basins sincerely thank the flood control committee of the Kansas City, Mo., Chamber of Commerce for their cooperation and for making facilities available for this meeting."

The following two resolutions were passed unanimously at a meeting on November 29 and 30, 1951, in Kansas City, Kans.:

"*Resolved*, That the committee recommend as of primary importance certain of the projects for which the planning necessary for construction has been completed as of primary importance by the association to the short term of Congress and that the association resolve itself as a body to the promotion of these projects.

"*Resolved*, That we urge at the short session of Congress that necessary appropriations be made for the Tuttle Creek, Strawn, Toronto projects and Tarkio-Squaw levee district of Missouri."

Chairman McKellar. Your next witness, please.

Senator SCHOEPPEL. Our next witness is Noel T. Tweet, executive director of the Missouri-Arkansas Basins Flood Control Association. Mr. Tweet, please.

## STATEMENT OF NOEL T. TWEET, EXECUTIVE DIRECTOR, MISSOURI-ARKANSAS BASINS FLOOD CONTROL ASSOCIATION

### LEVEE CONSTRUCTION AND TUTTLE CREEK DAM, KANS.

Mr. TWEET. Mr. Chairman and members of the committee, I am Noel T. Tweet, executive director of the Missouri-Arkansas Basins Flood Control Association. I am a professional engineer and live in Kansas City, Kans.

Mr. Chairman, I have one statement which I would like to file for the record, from the chamber of commerce of Kansas City, Kans.

Chairman MCKELLAR. Without objection, it will be inserted in the record.

Mr. TWEET. I have talked to Governor Arn this morning. He was sorrry that he could not be here, and he asked me to read the statement that he made to the Civil Functions Subcommittee of the House Appropriations Committee on February 26, 1952. Part of this statement has been referred to by one of the witnesses, but I shall read the entire statement so as to clarify the whole intent of the Governor's viewpoint.

"The State of Kansas was seriously damaged by the 1951 floods on the Kansas River and other rivers of the State. The impact of the disastrous Kansas River flood was felt all the way from Junction City through Fort Riley, Manhattan, Wamego, St. Marys, Silver Lake, Topeka, Perry, Lawrence, De Soto, Linwood, Bonner Springs, Holiday, Morris, Turner, and Kansas City. It also caused great devastation in the valleys of the Marais des Cygne, Verdigris, Neosho, Cottonwood, and Arkansas Rivers. Although the people in these cities and in the river valleys are the ones who suffered directly, the whole State of Kansas was adversely affected, and the economic loss will be felt for years to come.

"In order to render some assurance that such devastation will never occur again, all of the people of Kansas are insistent upon and vitally concerned with flood prevention, although there are some differences between individuals and groups as to how flood control can best be accomplished. However, the people of Kansas pretty well agree that flood prevention, to be effective, must involve a comprehensive plan embracing (*a*) the construction of dikes and levees for immediate city protection; (*b*) some of the large reservoirs on the main stems; and (*c*) a soil-conservation and watershed-treatment program, such as referred to in the Young plan.

"The first of these phases, that is the building, construction, and reconstruction of dikes and levees, is pretty well under way. The second and third phases seem to have brought about some dispute between the various Federal agencies, some of which advocate the Pick-Sloan plan and some of which advocate the Young plan embracing watershed treatment. There should be closer cooperation between such agencies, so that the two plans could be coordinated. The engineers seem to be of the opinion that the Tuttle Creek Dam on the Big Blue River north of Manhattan, Kans., is the key reservoir in

any plan for reservoir control of flood on the Kansas River. Citizens of Kansas with engineering training represent a very, very small percentage of Kansas' population and the views expressed by laymen who are interested in flood control, some of whom prefer one plan and some the other, perhaps do not have the benefit of engineering knowledge, except as they obtain it from studies and reports by various engineering groups.

"These laymen, however, seem to be definitely agreed that flood control should be the paramount purpose in the construction of any reservoir program.

"In this flat plains country where stream flow is more or less intermittent, it is believed that electric power is neither practical nor feasible and therefore should not be considered as one of the purposes or uses of any large reservoir. There may be some instances where irrigation is practical, but it is not believed that that would apply to the proposed Tuttle Creek Reservoir. Therefore, if the Tuttle Creek Dam from an engineering standpoint is a key reservoir and essential to any plan for reservoir control of floods on the Kansas River, it should be constructed as a single-purpose project—that is to say, solely for flood prevention. To accomplish this purpose, it would seem that it could best be of the so-called dry-dam construction which would permit the use of many acres of the fertile Blue Valley farm land during nonflood years. There is more or less general understanding that there can be no objection to the so-called dry dam from an engineering standpoint as a single-purpose flood-prevention project.

"Years of great floods continue to reemphasize the necessity of flood prevention and now, more than ever before, the urgent need for some comprehensive system is apparent. Since the Tuttle Creek Reservoir appears to be the key to that one phase of a comprehensive flood-prevention program, that is, main-stem reservoir control, then an immediate start should be made because there has already been too much delay in getting a comprehensive flood-prevention program under way. To do so, of course, would require the immediate appropriation of initial funds for this purpose by the Congress."

TORONTO DAM, KANS.

Now, with regard to the other projects in Kansas that we have talked about, here is what Governor Arn has to say:

"An appropriation for planning on the Neosho River and its tributaries should be made now.

"The development of the central program is under way on the Verdigris River and its tributaries. The operation of the Fall River Reservoir during the great flood of 1951 proved the effectiveness of the program. It does work.

"We are advised that plans are so advanced that construction can begin on the Toronto Dam on the Verdigris River. The immediate construction of the Toronto Dam will be of great value to the State of Kansas. We urge an apporpriation at this time for the construction of the dam and reservoir."

Chairman McKellar. Are there any questions?

(The prepared statement of the Chamber of Commerce of Kansas City, Kans., follows:)

THE CHAMBER OF COMMERCE OF KANSAS CITY,
*Kansas City, Mo., May 14, 1952.*

ARMY CIVIL FUNCTIONS COMMITTEE OF SENATE APPROPRIATIONS COMMITTEE,
*Senate Office Building, Washington, D. C.*

(Attention: Senator Kenneth McKellar, chairman.)

GENTLEMEN: The Chamber of Commerce of Kansas City, Mo., urgently requests that you restore to the President's budget the item of $15½ million for starting construction of the flood-control Tuttle Creek Reservoir on the Blue River, a tributary of the Kansas River. Further delay in the construction of this authorized project will expose the people of the Kansas River Valley and the lower Missouri River to more flood hazards.

The urgent need for this reservoir is emphasized by the President, including money for its construction in his budget recommendation for the fiscal year of 1953. Those who advocate delaying appropriations for Tuttle Creek Reservoir pending a report and recommendation of the Missouri River Basin Survey Commission should review the President's statement made at the time he created the Commission, in which he said: "Federal expenditures for resource-development work are necessarily being very sharply limited during the present emergency. Certain work must go forward, however, even in times like these, in order to strengthen our economic capacity or to prevent serious economic loss. The budget which I shall shortly transmit to the Congress contains minimum funds for this type of work, including the commencement of a limited number of projects which should not be longer delayed."

Obviously, this project is so important that the President considered any delay unwise and, therefore, included $15½ million in his recommended budget.

The Kansas River presents the greatest flood menace of any stream in the United States. This was the opinion of eight of the country's most distinguished engineers who studied flood control for the National Resources Board in 1932 at the direction of the President. This was proved by the record destructive flood of July 1951.

The restoration of local levees to protect farms and cities is costing the Government a substantial sum of money. To delay the construction of Tuttle Creek Reservoir for control of the floodwaters of the Blue River, tributary of the Kansas, is to continue to expose this large investment to the danger of further loss.

The entire Nation was affected by the Kansas River flood of 1951. With services interrupted for many days on the 12 trunk-line railroads that center in Kansas City, shipments were delayed, perishable goods spoiled, and many man-hours of work lost in defense plants and other industries.

The Tuttle Creek Reservoir, after proper engineering studies, was first authorized by Congress June 28, 1938. Again, on December 22, 1944, Congress included Tuttle Creek Reservoir in the general comprehensive plans for flood control. No competent engineers have ever determined that the Tuttle Creek project was not necessary for control of flood waters on the Kansas River.

Although the Tuttle Creek item was omitted from the appropriation bill as passed by the House, it did have support of some strong leaders as is evidenced by the following extract from letter we received under date of April 3, 1952, from the Honorable Clarence Canon, chairman of the House Appropriations Committee and a member of the subcommittee of the Appropriations Committee on Army Civil Functions: "In response to your request I voted to include an appropriation for Tuttle Creek in the subcommittee when the bill was drafted. And on roll call I voted to include an appropriation for Tuttle Creek in the whole committee. And on the floor of the House I voted to earmark money for Tuttle Creek, and to make an appropriation for Tuttle Creek, on voice votes and on division, and I passed through the tellers in favor of the Scrivner amendment."

The thousands of wrecked homes, ruined farms, and destroyed businesses are fresh evidence demanding immediate construction of Tuttle Creek Reservoir. The thousands of homes that lie in heaps of rubble are terrible monuments to our past delays in building flood-control works.

We urge you to appropriate the amount included in the budget to start construction now on the Tuttle Creek Reservoir.

Respectfully,

THE CHAMBER OF COMMERCE OF KANSAS CITY,
C. J. KANEY, *President*,
GEORGE W. CATTS, *Executive Manager*.

Chairman MCKELLAR. All right, proceed, sir.

Senator SCHOEPPEL. Now, Mr. Chairman, I want to call on Mr. William P. Edwards, of Bigelow, Kans.

Chairman MCKELLAR. All right, sir; come forward, please.

## STATEMENT OF WILLIAM P. EDWARDS, BIGELOW, KANS.

OPPOSITION TO TUTTLE CREEK DAM, BLUE RIVER, KANS.

Mr. EDWARDS. Honorable Senators, it is pleasing to the heart of a Midwest farmer to realize that his Congressmen graciously allocate a part of their time in order to hear his expression on this controversial issue. Such graciousness, however, comes as no surprise, since I have had the privilege of meeting with this committee on two previous occasions.

I am a lifetime resident of the Blue River Valley of Kansas, a farmer of land in the area affected by the proposed construction of the Tuttle Creek Dam, and an individual conversant with the thinking of his neighbors in the valley and on the upland alike, on an issue of grave importance to them for now over 12 years, and of concern to the Congress. In thus appearing from the valley I find myself in a difficult position. I know the Senators to have the deepest sympathy and understanding for the people who would lose their homes and land in the building of this reservoir.

But if the dam is the only method of preventing floods, then sentiment must yield to harsh reality, and he who voices protest seems to do so from selfish interests involved. Thus, while he is heard with a sympathetic ear, his words bear little actual weight. By the same token, I am given to wonder if the Senators also feel that those who live below the dam and expect thereby to enjoy economic advantages of flood protection at the taxpayers' expense, are not also appearing from purely selfish motives and their testimony considered accordingly? We do know, sirs, that this controversy transcends self-interests which, of necessity, exist on both sides, and we certainly are not asking you to sit in judgment on so irrelevant an issue.

On one matter, Senators, I feel compelled to make this position of my people so clear and above question, that in all your deliberations you will remember it, if nothing else of what I have to say, and that is this, the people of the Blue Valley know the necessity of and are just as desirous of flood control as anyone, anywhere. In our own valley we have experienced damaging floods. We saw last year's flood devastation in Kansas and attest to the truth of the heart-breaking stories of its destruction. We had friends and relatives among the flood-damaged victims. We helped to clear the stricken area of debris and slimy mud. We sent clothing and aid to those who suffered loss and showed ourselves to be as sympathetic as some have called us stubborn. We want no repetition of such a disaster, and with all who appear here today seeking flood control, we are in accord. Our one point of divergence is not that of need, but only that of method.

OPPOSITION TO PROGRAM

The people of the Blue Valley would leave their homes as patriotic citizens and brave soldiers, if we could be constrained to believe that the Tuttle Creek Dam would prevent future flood destruction in the Kansas River Basin, and was the only way floods could be prevented. But in all sincerity, Senators, after a dozen years of education, and believe me, sirs, we have been subjected to most thorough education, we are increasingly convinced that the large-dam plan is not the best solution for flood control that American ingenuity can devise. We understand that we will be monetarily compensated for our homes and land if we are forced to leave. To believe otherwise would be to imply distrust of Government, and I hope that it is not indicative of our naive simplicity to say that we are a people who ardently admire, believe and trust in our Government, and gladly recognize our obligation to transmit to our children an even better land and America than that which we have known. We no longer think of our opposition as a matter of saving our homes or valley, that is but a byproduct of the fight. Our opposition stems from the love we bear our country, for we see this perfidious plan to dam and to destroy as harmful to our Nation's welfare. Regardless of the outcome of this project, no matter where we are, as loyal American citizens, we shall continue to oppose like plans as an unsatisfactory and harmful solution to the flood-control problem.

I trust that this does not sound like just the ranting of a fanatic. I present it as the sincere and heartfelt expression of a thinking and intelligent people. While time will not permit me to detail the many reasons why we are so convinced that there is a better solution to flood control in areas like ours, I shall ask your indulgence to mention just a few. Please bear in mind that we are thinking of the large dam only as it applies to our type of area, and only as a flood control measure. This does not imply condemnation of all large dams for any purpose anywhere. The topography and water resource needs of our part of Kansas, like that of parts of Missouri and Nebraska, is far different from that found, for example, in Tennessee or North Dakota or Oregon, and as such constitutes a condition warranting a different measure of treatment. Structures that prove effective for these other areas are not necessarily best for Kansas, nor is it justified to say that reservoirs for flood control only should follow the same design as those built for power or irrigation. For this reason we commend the President's 11-man survey commission for the Missouri River Basin in their study of this problem and await their recommendations.

BLUE RIVER VALLEY INUNDATION BY TUTTLE CREEK DAM

In a less general statement, I call the committee's attention to the effect the Tuttle Creek structure would have on the Blue Valley. The reservoir, as authorized, would inundate 56,000 acres of rich land which is now producing food sufficient to feed 40,000 people a year. It would necessitate the relocation or abandonment of all or part of two railroads, five State and national highways, seven towns, many cemeteries and hundreds of miles of county roads, REA and telephone lines. Over 500 families would be forced to leave farms, some of which have been their family homes for as much as 90 years. The loss of

yearly production would amount to $6 million a year, and this loss would become an annual recurring loss forever. If the present program of the Engineers is carried out in full, a similar story of community destruction and production loss, though maybe on a smaller scale, would be repeated many times over in Kansas. Our State and Nation can ill afford the social and economic impact of such losses.

FLOOD PREVENTION BY TUTTLE DAM QUESTIONED

On last December 14 in Topeka, Kans., at a meeting of Missouri Basin Inter-Agency Committee, Colonel Lincoln, chief of the Kansas City Division of the Corps of Army Engineers reported the results of the engineers' flood findings. In this printed report, Colonel Lincoln acknowledged that had all the 14 proposed levees and 17 proposed dams for the Kansas River, including Tuttle Creek, been completed before last summer's flood, the water could not have been contained and flooding over the levees would have occurred at Manhattan, Topeka, Lawrence, and Kansas City. This statement of a situation which had already been pretty well established and accepted, was made to explain the reason for the engineers' request for an increased program in Kansas, calling for 22 additional dams and an increase in expenditures from $300 million to $700 million. From this we conclude that one dam on the Blue River would not have stopped last year's flood, nor can it be expected that it ever would in the future. We begin to wonder, as the engineer's program grows to such Gargantuan size, if the cure isn't worse than the illness, or at least whether there isn't a better cure.

SOIL CONSERVATION RETENTION DAM PROGRAM

The hills bordering the fertile valleys of Kansas are teeming with sites for thousands of smaller retention, down-drain dams in which excessive rainfall can be temporarily stored on nonproductive wasteland. Combine these watershed-engineered dams with soil-conservation practices, and we have a twofold program of preventing land erosion losses and controlling water runoff alike. Completed watershed-treated areas have shown that such a program will effectively control water flows in small streams. If it works on all the small streams, then it will control the main channels, for after all, is not the whole but the sum of its component parts? The large-dam program is designed to stop peak floods by storing on productive valley land, the waters which have already gutted the uplands. The Blue River-watershed plan is part of House Document No. 373, Eighty-first Congress, first session, now ready for congressional authorization. The adoption of such a plan entails no delay in starting flood control on the Blue River now, and the people, now organized in a watershed association, are ready to go on this plan.

SOIL EROSION

Our Nation is increasingly aware of the future demands for increased food protection. We are losing 500,000 acres of land each year through soil erosion. Our population is increasing 6,000 more each day. Within one generation, for every average American family

of four, there will be a fifth plate set at the table. From whence is the food for this fifth plate coming from? From the land we have so faithfully husbanded, or will the four already at the table have to do with less as they share their portion with the fifth?

The handwriting is on the wall, it takes no Daniel to interpret it. This is why the people of my valley are so desperately, militantly concerned for the welfare of our State and Nation. If we are to spend the $700 million to build in Kansas the dams which the engineers cite as being essential to their completed flood-control program, will the Congress then be sympathetic, or even able, to give to Kansas millions more for soil conservation? It seems unlikely and so necessitates a choice. Either Congress now embarks upon a program that will squander millions in building large dams to impound water on now productive land, or it determines to wisely use our wealth for watershed engineering and dry dams and so save and improve our food-producing soil. Let it not be said of us by hungry future generations that we were bitterly shortsighted and unrealistic in meeting this greatest challenge of our period. Today is the day of decision.

Senator SCHOEPPEL. Our next witness is Mr. Chandler Jarvis of Winfield, Kans., representing the Kansas State Chamber of Commerce.

Chairman MCKELLAR. All right, sir; will you come forward, please.

## STATEMENT OF CHANDLER JARVIS, WINFIELD, KANS., REPRESENTING THE KANSAS CITY CHAMBER OF COMMERCE

### BIG DAM AND WATERSHED FLOOD-CONTROL CONTROVERSY

Mr. JARVIS. Mr. Chairman, my name is Chandler Jarvis of Winfield, Kans. I represent the Kansas State Chamber of Commerce. I have a prepared statement which I wish, in order to save time, to present for inclusion in the record. Then I would like to orally make a few brief remarks.

Chairman MCKELLAR. That may be done.

Mr. JARVIS. In emphasizing some of the high lights of my statement, I wish to briefly call your attention to a series of meetings that have been conducted in the State by the Kansas State Chamber of Commerce at various points in the State of Kansas.

Following the devastating flood in July of 1951 there was a series of meetings conducted by various organizations. That series of meetings resulted in no agreement as to what should be done about flood control. Recognizing that fact, the State chamber of commerce organized a flood-control council in an attempt to bring the people of Kansas together in their thinking on flood control.

The membership of that council was composed of approximately 45 people. About a third of them were known as advocates of big-dam solutions to flood control. About a third were absolutely opposed to big dams. About a third were known to have no previous commitments on how flood control should be had.

I was appointed chairman of the committee because I had had no previous commitments or no ideas about the solution to flood-control problems.

On August 14 we had a meeting in Topeka, Kans., at the Kansan Hotel, and we spent the entire day sitting across the table from each

other discussing various ways of controlling floods and trying to determine what should be done.

At the conclusion of that day there was a resolution drawn, on which resolution committee there were various advocates of flood control. That group unanimously accepted the theory that it will be necessary to have a comprehensive flood-control program including soil conservation, watershed treatment, and the building of big dams.

At that time the policy was general. No dams were named or anything else.

In the interim between August 14 and December 6 and 7, various members of the council attended different meetings throughout the State in which flood control was discussed. We held six district meetings of the State chamber of commerce at various places throughout the State that were particularly well attended, and a substantial portion of the time in those district meetings was given to flood control. Through the open forum policy, we were informed of the thinking in various parts of the State with regard to flood control.

Subsequently it developed that many of the people didn't know exactly what projects were proposed by the Corps of Engineers, the Bureau of Reclamation, or the Soil Conservation Service. Therefore, in the first part of November of 1951 we commenced to contact the three Federal agencies in an effort to get them together in a meeting in Topeka to tell us about their various programs.

FLOOD CONTROL CONFERENCE

That meeting was held on December 6 and 7 in Topeka. There were a number of people attending that meeting pro and con, big dam and watershed treatment for flood control. We had the representatives for the Corps of Engineers of Kansas City, Albuquerque, and Tulsa. Kansas is divided into three engineering districts. We had the representatives of the Soil Conservation Service from Lincoln and Omaha, Nebr., from Tulsa, Oklahoma City, as well as representatives of the Bureau of Reclamation from Albuquerque, Denver, and Oklahoma City for the Kansas City area. They subjected themselves at that time to questions. They gave us their program and they answered the questions.

Then when we were finished it was apparent, in our judgment, that the three agencies had gotten together on a system of flood control.

An example was used which was the Washita Valley in Oklahoma which was widely discussed at our meetings.

One of the members of the council stated that if anyone could show him how the watershed treatment was not to be neglected in favor of the big dam, he would go along with our council.

At that time Dr. Dean of the Soil Conservation Service stated that if the same conditions had existed in Oklahoma as had existed in Kansas in May, June, particularly July, the soil conservation and the watershed treatment would have been of little if any benefit as far as flood control down the main stem of the Washita River.

Mr. Young was present at the meeting and further stated that the watershed treatment and soil conservation method would be of little if any benefit to our area, that it required dams, big dams, to control floods.

As a result of that meeting we were convinced in Kansas, that is, by far the greater majority, I think, that the only way to control floods is through the comprehensive method. Now, there had been no opposition develop in the State actually to an over-all program which incorporates big dams, and there is no opposition to it until you specifically mention certain dams. I think probably that there is very little opposition to any dam in Kansas except the Tuttle Creek Dam.

OPPOSITION AND SUPPORTING FACTIONS

The members of the opposition are a small but very militant minority. I call your attention to the fact that the Representatives in Congress who live in the various districts where these dams are to be built are in unanimous agreement that they should be built. The Governor of our State agrees that Tuttle Creek Dam and the Toronto Dam and the Strawn Dam should be built.

Our water resources man in our department of agriculture in Kansas agrees that the three dams should be built. I respectfully submit to this committee that by far the majority of the people in Kansas agree and are together today on the flood-control program which includes Tuttle Creek, Toronto, and Strawn Dams.

Thank you very much.

(The following statement was submitted:)

SUMMARY OF REMARKS BY CHANDLER F. JARVIS, WINFIELD, KANS., CHAIRMAN, FLOOD CONTROL COUNCIL, KANSAS STATE CHAMBER OF COMMERCE

Mr. Chairman, and members of the committee, my name is Chandler F. Jarvis, and my home is in Winfield, Kans. I am here today as a representative of the Kansas State Chamber of Commerce. I am chairman of the flood control council of that organization. The Kansas State Chamber of Commerce is a voluntary, nonprofit organization, with a State-wide membership of approximately 2,500 individuals, firms, and associations in the State of Kansas.

I do not propose to discuss with you the technical and engineering aspects of the item you have under consideration, the appropriation for the Toronto and Strawn Tuttle Creek project. I leave such discussion to persons who are more familiar and better qualified in this field than I am.

Instead, I would like to tell you, in a very few minutes, the history of an effort—a movement—in Kansas concerning this vital issue of flood control. In a way, if I can be pardoned the personal reference, this story is somewhat the history of my own association with this issue.

As all of you know, I am sure, the matter of flood control has been debated, argued, analyzed, studied, discussed, and what have you for many years in Kansas. And as you also know, no real agreement was ever reached. In fact, there never was any direct effort by any official or unofficial group to obtain such agreement. The people who believed one way all got together and told each other how good their ideas were—and how terrible the other folks and their ideas were. Meanwhile the other folks were doing exactly the same thing. There were a lot of people concerned with the subject, but generally they were a long way apart in their thinking.

The disastrous floods of 1951 demonstrated the folly—the very uselessness—of such a situation. Out of every tragedy there usually comes some good, and in this case, it was a recognition on the part of a number of people that this bickering and controversy and arguing had to be put aside—and that we had to get together in our thinking.

It was this realization which caused the Kansas State Chamber of Commerce to assume the responsibility for attempting to unite the people of Kansas, insofar as might be possible, in the development and support of a truly State-wide program of flood protection. A flood control council—a large committee—was set up within the State chamber and handed the responsibility of this assignment. Now right here we come to what is one of the most significant points in my story. We appointed about 45 to 50 persons as members of that flood control council. Of

that number, one-third of them were known to be advocates of the "big dam" idea of flood control; another third were professed advocates of what would be called the "watershed treatment" or soil conservation method, and in this group were the leaders living in the Blue Valley and opposed to the Tuttle Creek Dam; and the remaining third were people who were as nearly neutral on the subject as any group of people who could be assembled. They were not necessarily uninformed on the issue of flood control; they simply had not made up their minds—and were open to being convinced. In my own case, I was in the latter category. I was chosen chairman of the council because I had no preconceived notions of what ought to be done; I had no prejudices; I needed, and sought, information and facts.

This council met in Topeka on August 14, 1951. I look upon that date as representing somewhat of a turning point in flood-control planning and thinking in Kansas. It actually was the first time, to my knowledge, that representatives of all the points of view on flood control had sat down across from each other at the same table and set out to develop something on which they could all agree.

I do not want to bring before you all the discussion which occurred on that day, but I assure you that it was both spirited and varied. At the end of the day, however, we had reached certain basic conclusions upon which there was unanimous agreement. In summary, they declared that no one plan of flood control would work by itself; that only a coordinated plan would do the job, which required complete soil conservation programs and the building of big dams.

Admittedly, that policy was a general statement. At that stage of the game, it had to be—because, as I mentioned, it was the first time that the varying points of view in Kansas had gotten together to see what could be done. In fact, it was the first time they were ever able to agree on anything.

With this general statement as a starting point, the council then proceeded in an effort to define its beliefs in more detail. On December 6 and 7, the council again met in Topeka—the first day was devoted to committee meetings concerning the Arkansas Valley and the Kansas Valley, as Kansas is divided into two basin areas, the south half of the Arkansas Valley and the north half of the Kansas Valley; and the second day was a meeting of the entire group.

In this meeting, we had the benefit of the advice and counsel of the representatives of the three Federal agencies primarily concerned with flood control—the Bureau of Reclamation, Corps of Army Engineers, and the soil conservation agencies of the Department of Agriculture. Because of the way in which jurisdiction in Kansas is divided among these agencies, it was necessary to have representatives from several areas and districts. Representatives of the Bureau of Reclamation came from Denver, McCook (Nebr.), Oklahoma City, Pueblo (Colo.), and Amarillo (Tex.) offices; Corps of Engineers representatives came from Kansas City (Mo.), Tulsa, and Albuquerque; while United States Department of Agriculture representatives came from Tulsa and Lincoln (Nebr.). I point this out only to emphasize to you that we did have before us the top spokesmen of these agencies and that we did have fair and equal representation from all agencies in the areas concerned. We were after all the information available from the persons best qualified to give it.

Out of these 2 days of open discussion there came a further refinement of policy. That statement is entitled "Policy Declaration Relating to Flood Control" and is submitted to you herewith. That policy was developed by the flood control council of the Kansas State Chamber of Commerce and was subsequently adopted by the organization's board of directors. The members of this board represent all sections of Kansas.

I would like to quote a portion of that statement to you—the full statement is contained in it. The preamble is as follows:

"Flood control is essential in Kansas. Every survey of public opinion demonstrates that the citizens of Kansas want and will support a program which will provide maximum flood control in keeping with sound economic principles. Likewise, there is general agreement that no single program so far offered by any governmental agency or other group can provide adequate flood control by itself. Instead, there must necessarily be a combination of the desirable elements of the several programs.

"Attention must be given to the subsidiary benefits which can result from the various methods for the control of floods. Proper soil-conservation practices stand out as an example of this fact. Such practices not only assist in the control of floods through their help in controlling upland waters, but at the same time contribute materially to the development of the land itself.

"Any program for the control of floods must be tailored to fit the requirements of the particular watershed it is intended to serve. A program which is satisfactory for one watershed will not necessarily be satisfactory for another. Consequently, both reservoirs and conservation practices have their place. Dams and reservoirs are not a substitute for conservation practices; neither are conservation practices a substitute for dams and reservoirs."

Now that, Mr. Chairman and gentlemen of the committee, is the preamble. I direct your attention particularly to the statements calling for full coordination of the various programs.

The policy statement proper cites development of a watershed act within Kansas; rapid extension of soil-conservation practices; full coordination of Federal agency work; adequate compensation for displaced property owners; and several other points. In item 8–a, it specifically calls for appropriation by Congress of the funds necessary for such flood control and irrigation projects as have been recommended by the Corps of Engineers and the Bureau of Reclamation and authorized by Congress up to and including December 7, 1951. The cut-off date of December 7 was established because that was the date of the flood control council meeting and we had studied only those projects advocated at that time. The council knew that various other projects, which have since been recommended by certain Federal agencies, were under consideration.

The policy which I cite asks your support of the project you now have under consideration—the Toronto and Strawn Tuttle Creek project.

Now I do not maintain that this policy which I quote had the unanimous support of the members of the council who considered it. There was opposition to it, and those opponents were given free opportunity to express their point of view. The final vote, however, was overwhelmingly in favor of the policy. I recall to your thinking at this point the original composition of the membership of this council—wherein at least one-third of the members were of an open mind. The decisive acceptance of the policy indicates that those previously undecided persons had made up their mind.

Following adoption of this policy by the board of directors of the organization I represent, the policy was submitted for the consideration of chambers of commerce and other groups in the State of Kansas. As of today, 23 chambers of commerce in all parts of Kansas have endorsed this policy in full. Remember, this is a State-wide policy. It calls for flood control measures in every section of the State where such action is a necessity. It is not confined to any particular locality. It contains principles which have gained support throughout the State.

In addition to this support by 23 chambers of commerce, 6 more organizations have supported the policy at least in part. I think it is only fair, however, to point out that three of the organizations which have accepted the policy only in part have taken exception to the provisions which support construction of the project you have before you.

Nevertheless, it is significant that the only organization which opposes the policy in full is located in the Big Blue Valley. This is the only organization which has taken such action.

I submit to you, gentlemen, that a very substantial majority of the people of Kansas are now in agreement on this subject. Prior to this time, we were not in such agreement. Consequently, prior to this time, we had no reason to expect you, as Members of Congress, to take the initiative in providing funds for flood control. Now, however, we come before you with our thinking greatly unified. We now are justified in expecting decisive action on your part.

Mr. Chairman and members of the committee, you have the responsibility for a decision which is basic and fundamental. I realize that you not only must give consideration to the engineering aspects of this question, but also to the human factors. In any project of this kind, there is a definite and important human element. Some people have to make a direct sacrifice. Those people should be compensated as adequately as is possible.

In this particular case, the persons who have opposed the Tuttle Creek project have maintained that the "watershed treatment"—or soil-conservation method—should be employed instead. This would be fine and would have the support of everybody if it would do the job that has to be done. Unfortunately, according to the best evidence available, it would not do the job.

With respect to the thinking of people supporting one or another plan for flood control, I would like to review an incident which occurred at the December 7 meeting of the council. One of the spokesmen advocating flood control

from soil conservation and watershed treatment only, and who was violently opposed to the building of any big dams, stated that the United States Department of Agriculture and the Army engineers had each made surveys of the same valley, the Washita, in Oklahoma. The United States Department of Agriculture could accomplish a complete soil-conservation and watershed treatment at a cost of $1,983,000. The flood-control program of the Army engineers would consist of the building of one dam on the main stem of the Washita at a cost of $6,000,000. The spokesman then stated that if anyone could show him where it was wise from any viewpoint to accept the Army engineer's project, as opposed to the United States Department of Agriculture program costing only a third of the engineer's dam, he would enthusiastically join the big dam advocated.

Thereupon, a representative of the Soil Conservation Service of the United States Department of Agriculture stated in substance that the soil-conservation and land-treatment methods proposed by his department would be of little, if any, benefit as a flood-protection measure during times of abnormal excessive rainfall, such as we had in Kansas during May, June, and especially July 10, 11, and 12, 1951, as the soil would be saturated and would not hold or absorb the run-off water; that in his opinion such treatment would be of considerable benefit and would probably prevent much flooding in periods of less excessive rainfall; and that to assure adequate flood protection on the main stem of the Washita it would be absolutely necessary to build the Army engineers' big dam. In other words the program advocated by both the Soil Conservation Service and the Army engineers was and is necessary to accomplish flood control.

The spokesman opposed to big dams did not accept the statements of the representative of the Soil Conservation Service and, as a matter of fact, he then and there accused the three governmental agencies of misleading our council, and in general ran down the honesty of the three agencies.

I cite this example to show you the apparent uselessness of efforts to convert most of those opposed to big dams. They ridicule any evidence and facts supporting the building of big dams and have not offered the evidence, facts, or figures of any other complete survey to support their position. On the other hand, I have yet to talk with an informed big-dam advocate who does not give his wholehearted support to soil conservation and land treatment advocated by the United States Department of Agriculture.

All of the representatives of the three Federal agencies who appeared before our group on December 6 and 7 agreed that no one plan would be sufficient by itself to insure adequate flood control. They further stated that all programs must be constantly reviewed and revised in the light of new data. They further agreed that the programs recommended as of that date, December 7, were vital and would continue to be vital in any flood-control program which might be developed.

Spokesmen for the Soil Conservation Service of the United States Department of Agriculture testified before our group that the watershed treatment was not a substitute for the so-called big dams. Such treatment, they pointed out, would be a supplement to the dams and reservoirs, but would not substitute for them. Vice versa, spokesmen for the Corps of Army Engineers do not state that dams and reservoirs are a substitute for watershed treatment. I ask you to keep this in mind as you hear further presentations of this question.

One final point * * * this matter of flood control, in the area which we are considering today and in all other areas, is truly national in character. The effects of floods are felt nationally, and in the national economy. Most sections of the United States were affected by the July flood in Kansas, in one way or another.

When I began my testimony, I said that when I first went into this flood-control matter, I had no preconceived notions. My mind was open. I sought to be convinced.

Mr. Chairman, and members of the committee, I can no longer make that statement. I have had the benefit of advice and discussion by representatives and experts in all fields. I have heard their testimony. I have been convinced. I believe that we must have flood protection, and that the project before you is a key to that protection.

I respectfully urge you to give your support to this project.

Thank you.

Senator SCHOEPPEL. Mr. Chairman, I believe that unless the information I have before me is incorrect that that concludes practically

all of our witnesses with the exception of one other gentleman. Will you give me your name, please?

## STATEMENT OF JOHN FERNSTROM, DIRECTOR, MISSOURI-ARKANSAS VALLEY BASIN FLOOD CONTROL ASSOCIATION

### TURTLE CREEK DAM AND KANSAS-MARAIS DES CYNES-OSAGE BASINS FLOOD CONTROL

Mr. FERNSTROM. I do not wish to take much of the time of the committee. I have three statements here which I will file. The only thing I want to say, Senator, is that I believe I have been wasting my time in coming up on these matters since 1935. I still don't know any more than the Army engineers do. Thank you, sir.

Mr. Chairman, I would like to have inserted in the record a letter I addressed to you, sir, as Director of the Missouri-Arkansas Basins Flood Control Association; a letter addressed to the chairman of this committee from Victor Black, president of the North Topeka Merchants Association, a resolution adopted by the North Topeka Reconstruction Committee; and I would like to file for the record a statement by Col. L. J. Lincoln, Kansas City district engineer, presented to the Missouri Basin Inter-Agency Committee at Topeka, Kans., on December 14, 1951.

Chairman MCKELLAR. Without objection, that may be done.

(The documents referred to are as follows:)

KENNETH MCKELLAR,
*Chairman, Senate Appropriations Committee,*
*Washington, D. C.*

GREETINGS: The North Shawnee County Branch of the Missouri-Arkansas Basin Flood Control Association with thousands of members throughout this area wish to apprise your committee and Congress of their desire for the only comprehensive flood-control plan which has the construction of Tuttle Creek Reservoir as an immediate must.

This vast area comprising the valley of the Kansas River must never again be devastated. Cities have seen destruction, families displaced from farm land rendered nonarable for some time to come.

Other catastrophes can be cushioned through insurance. In flood we can only seek a protection against repetition through levies and reservoirs.

The human misery experienced in the past floods remains. We can, however, through the Pick-Sloan plan, restore confidence and offer security to those who choose the back-breaking, soul-searing task of restoration with a faith in our Congress to speed the construction of Tuttle Creek which was approved so many years ago. We pray that you alleviate our fears through an immediate start on this humanitarian project.

JOHN F. FERNSTROM,
*Director, Missouri-Arkansas Valley*
*Basin Flood Control Association.*

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NORTH TOPEKA MERCHANTS ASSOCIATION

North Topeka, Kans.

KENNETH MCKELLAR,
*Chairman, Appropriations Committee,*
*United States Senate:*

*Resolved*, That we respectfully petition that the Senate of the United States make immediate appropriation for the construction of Tuttle Creek Reservoir.

The people of Kansas are still stunned as a result of the flood of 1951. Neither the finances nor the morale could weather another catastrophe of this kind.

Those attempting rehabilitation are only able to go on through loans and faith. A repetition would leave them neither their depleted collateral nor courage, and this Kansas River Valley, the bread basket of the Nation, with its hundreds of miles of farms and cities, would be desolate and abandoned.

We look to our Congress as the only source of protection and pray that you expedite this, the first step of comprehensive planning, the implementation of Tuttle Creek Reservoir.

THE NORTH TOPEKA MERCHANTS ASSOCIATION,
VICTOR BLACK, *President.*

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NORTH TOPEKA RECONSTRUCTION COMMITTEE

North Topeka, Kans.

*Be it resolved*, That this committee formally petition the Senate of the United States to take immediate steps to appropriate the necessary funds for the commencement of construction of the Tuttle Creek Reservoir.

The people of the flooded areas of Kansas could not stand a repetition of last summer's flood. But they can only look to Congress for realization of the only practical plan of flood control for the Kansas River in existence today, the Pick-Sloan plan. Kansas needs and deserves your help.

NORTH TOPEKA RECONSTRUCTION COMMITTEE,
CONANT WAIT, *Chairman.*

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PRESENTATION OF COL. L. J. LINCOLN, KANSAS CITY DISTRICT ENGINEER, TO MISSOURI BASIN INTERAGENCY COMMITTEE, TOPEKA, KANS., DECEMBER 14, 1951

The disastrous floods of last summer demonstrated many things to many people but, first and foremost, here in Kansas the catastrophe demonstrated clearly that paper plans and projects on the drafting board are no substitute for works in place—are not a bulwark against rampant rivers. Yet, before we build, we must study and plan. In that way we translate the lessons and experience of the past to the planning and the works of the future. We know the floods of last summer are not the worst floods that can be visited upon the people of this State. You have already heard much about the last flood. My presentation today deals primarily with a future flood, a bigger and potentially more destructive flood than the one which has just occurred.

Many works and many interests contribute to the control of floods. No one values more than I the important contributions of local, State, and Federal agencies. Illustrative of this is the program of the Department of Agriculture for runoff retardation and soil erosion prevent on the watersheds of our streams, and the flood-control storage provided by the Bureau of Reclamation in reservoirs constructed primarily for irrigation.

The Congress in the Flood Control Act of 1936 definitely assigned to the Secretary of the Army and the Chief of Engineers responsibility for the investigation and the prosecution of works for flood-control and allied purposes in rivers and other waterways. This responsibility delegated by the Congress is regarded as a challenge to our deep sense of obligation as a Federal department, not only to plan and perform our work with diligence, skill, and efficiency, but to seek constantly to broaden our understanding of the problems involved, and the teamwork and coordination necessary to its effective fulfillment. Flood control on the streams of this Nation has been and is today a major function of the Corps of Engineers. To implement this functionn, investigations have been made, programs have been prepared, and projects have been built. Prior to the 1951 floods in Kansas, the Corps of Engineers had a flood-control program in this State which was fundamentally sound. A recent study of these floods shows conclusively that this program is still the essential framework upon which to continue planning for the control of floods.

The interest of the Corps of Engineers in stream improvement in the Midwest goves back 127 years. The initial activity in 1824 on the Missouri River consisted of the removal of snags as an aid to navigation of the stream by the shallow-draft vessels of that day. As early as 1882 work was carried on to stabilize the banks of the Missouri River in critical reaches in the interest of

navigation. In 1917 Congress broadened the scope of the corps' activities by making all laws relating to works of improvement for navigation applicable so far as practicable to works of improvement for flood control. Again in 1928 the Congress assigned to this organization the problem of evaluating on a Nation-wide basis the water-use potentialities of the streams of the country, which resulted in a series of comprehensive investigations covering flood control, navigation, power, and other purposes. Reports thereon were published and became known as the 308 reports. These comprehensive reports became the basis or the background for the formulation of a national policy on flood control which was promulgated by the Flood Control Act of 1936. This act contained the initial declaration of the concept that floods are a national problem, and that the Federal Government should take positive action toward their control. The act as modified and supplemented by subsequent acts, principally those of 1938 and 1944, establishes the Federal interest and responsibility for improvements for flood control and allied purposes.

In the Kansas River Basin, the most recent investigation and report covering flood control and related water uses was completed early in 1947. This report was transmitted to the Congress in June 1950 and is currently before that body for consideration (published as H. Doc. No. 642, 81st Cong., 2d sess.). A similar report covering the Marais des Cygnes River in Kansas and the Osage River in Missouri was completed late in 1947 and transmitted for consideration of the Congress early in 1950 (published as H. Doc. No. 549, 81st Cong., 2d sess.). These two reports recommend, in effect, an expansion of the initial stage of the Pick-Sloan plan which, as you will recall, was authorized for prosecution in 1994, by recommending the construction of 2 additional reservoirs and 10 local flood-protection projects in the kansas Basin, and 8 additional reservoirs and two local flood-protection projects in the Marais des Cygnes-Osage Basin in Kansas and Missouri.

*Status of existing, authorized, and recommended flood-control projects.*—Under the initial construction program for the Kansas River Basin, Kanopolis, and Cedar Bluff Reservoirs on Smoky Hill River and Medicine Creek, Enders, and Bonny Reservoirs in the Republican River Basin have been completed. These are multiple-purpose reservoirs providing other benefits in addition to effective reduction of flood damages within their limits of influence. Local protection works specifically for the reduction of local flood damages have been completed at Bartley and Indianola, Nebr. Units of the initial program at present partially completed are Harlan County (now nearing completion) and Culbertson (now Trenton) Reservoirs on the Republican River in Nebraska; and the major local protection projects for Topeka, Kans.; and for Kansas City, Mo., and Kansas City, Kans., at the mouth of the Kansas River. Also authorized for inclusion in the intial construction program but not yet started are Tuttle Creek Reservoir on Big Blue River; Glen Elder, Kirwin, and Webster Rservoirs in the Solomon River Basin; Wilson Reservoir on Saline River; and Red Willow, Pioneer, and Wray Reservoir in the Republican River watershed. Of this group, Tuttle Creek is specifically planned to provide vital reduction of flood damages at Manhattan, Topeka, Lawrence, the Kansas Citys, and other important cities and agricultural areas along the Kansas and Missouri Rivers. The other reservoirs will provide effective reduction of flood flows within the limits of their influence.

Continuing studies to keep the Kansas River Basin program, as well as programs for other tributary basins within the Missouri River watershed abreast of an ever-increasing economy within these basins, have led to previous recommendations for expansion of the original program. The expansion, springing logically from the basic concept of the general comprehensive plan, includes additional units which have become essential increments toward the realization of ultimate flood-control and which will provide benefits in excess of their costs under the expanding economy of the region. Projects of this group which are awaiting authorization by Congress are Milford Reservoir near the mouth of the Republican River and Perry Reservoir on the Delaware River, and local protection units at Merriam, Lawrence, North Topeka, Manhattan, Fort Riley, Abilene, Salina, and Marysville, Kans.; and at Beatrice and Hubbell, Nebr.

The initial construction program for the Marais des Cygnes-Osage River Basin has not been started. Presently authorized projects in the basin are the Pomme de Terre, Osceola, and South Grand Reservoirs, all in Missouri. The report on this basin recommends the modification of Pomme de Terre Reservoir, and replacement of the Osceola and South Grand Reservoirs by a system of eight

reservoirs. These eight reservoirs are Pomona, Melvern, Garnett, Hillsdale, and Fort Scott, all located in Kansas; and Hackleman Corner, Stockton, and Kasinger Bluff, all located in Missouri. The report further recommends the construction of flood-protection projects at Ottawa and Osawatomie, Kans. This recommended flood-control program, consisting of nine reservoirs and two local flood-protection projects, will provide substantial flood damage reduction for rural and urban developments in the valleys of the upper basin as well as a degree of flood-control comparable to the former plan along the lower Osage, the Missouri, and the Mississippi Rivers.

In summary the flood-control program for the Kansas River Basin, composed of existing, authorized and recommended projects is as follows:

Reservoirs:

Five completed multipurpose units (Kanopolis, Cedar Bluff, Medicine Creek, Enders, Bonny)

Two multipurpose units under construction (Harlan County by Corps of Engineers and Trenton by Bureau of Reclamation)

Eight authorized units (Tuttle Creek, Glen Elder, Kirwin, Webster, Wilson, Red Willow, Pioneer, Wray)

Two recommended reservoir units (Milford and Perry), or a total of 17 reservoir units.

Local flood protection projects:

Two completed units (Barley and Indianola, Nebr.)

Two partially completed units (Topeka, Kans., and the Kansas Citys, Mo. and Kans.)

Ten recommended units (Merriam, Lawrence, North Topeka, Manhattan, Fort Riley, Abilene, Salina, and Marysville, all in Kansas; Beatrice and Hubbell, Nebr., or a total of 14 local flood protection units.

Summarizing the flood-control program for the Marais des Cygnes-Osage Basin, the individual units and their status are as follows:

Reservoirs:

One multipurpose unit authorized (Pomme de Terre)

Eight reservoir units recommended (Hillsdale, Pomona, Melvern, Garnett, and Fort Scott in Kansas, and Hackleman Corner, Stockton, and Kasinger Bluff in Missouri).

Local flood-protection projects: Two recommended units (Ottawa and Osawatomie, Kans.).

On numerous occasions I have been asked: "What would have been the effects of these programs on the 1951 flood had they been completed and in operation at that time?" This question can now be answered as reliably and accurately as analysis of the theoretical situation permits.

This morning Mr. Carriker told you of the damages prevented by work in place at the time of the flood. The tangible damages prevented by the existing reservoirs is estimated at $1,800,000. At Topeka the south side levee and flood wall prevented losses of over $1,000,000 during the first phases of the flood even though backwater entering through sewers and a sandbag gap eventually flooded part of the area. Flooding of the municipal waterworks was prevented. Local protection works which prevented inundation of parts of the Kansas Citys prevented damages estimated at over a quarter billion dollars and protected vital ultilities and services on which the health and welfare of the metropolitan area depends. These completed works constitute only a small part of the programs now awaiting action by the Congress on funds and authorizations.

As a direct answer to the question of what would have happened had the authorized and recommended works been in place during the past flood, I can tell you that the damages they would have prevented during this single flood would have equaled a substantial portion of their cost. However, there would still have resulted a very great amount of damage.

To illustrate what might have happened in physical terms, let us consider the cities, going downstream, as they are concentrations of values and therefore subject to greater monetary damages. First, at Manhattan, the Tuttle Creek Reservoir would have fully controlled the flood discharges of the Big Blue River and prevented the repeated flooding of Manhattan. It would also have reduced downstream flood crests by approximately 75,000 cubic feet per second. However, even with this control and with the substantial reduction by the reservoirs upstream, the discharge of the Kansas River at Manhattan would have exceeded the previously planned design discharge by about 110,000 cubic feet per second and the recommended works along the Kansas at Manhattan would have been overtopped by 2 to 3 feet.

At Topeka, the controlled discharge would have exceeded the safe discharge by about 70,000 cubic feet per second and the existing or recommended works on one side of the river or the other would have been overtopped by 1 foot. At Lawrence, the controlled discharge would have exceeded the capacity of the existing works constructed by local interests by about 130,000 cubic feet per second which would have overtopped them by about 3 feet. At the Kansas Citys, the controlled discharge woud have been reduced from the actual crest by about 150,000 cubic feet per second which would have caused stage reduction up to 5 feet. Nevertheless, the water would have reached the top of the existing and recommended works along the Kansas River. However, the Fairfax industrial district would have been secure, the evacuation of the north Kansas City district would have been unnecessary, and damages estimated at $100,000,000 in these two areas alone would have been prevented. The general stage reduction below the reservoirs and along the Kansas River would have resulted in major benefits to the communities and agricultural areas outside these major damage centers. At Salina recommended local protection works aided by the completed Cedar Bluff and Kanopolis Reservoirs would have prevented inundation of that city. The local protection recommended for Abilene, Marysville, and Merriam, Kans., and for Beatrice and Hubbell, Nebr., would have protected those cities.

In the Marais des Cygnes Basin, the recommended reservoirs above Ottawa and Osawatomie would have reduced the actual flows by over one-half. However, this would have been insufficient reduction to provide safe margins at the local protection works for these cities. Nevertheless, these reservoirs and those recommended in the remainder of the Osage Basin would have provided substantial reduction of the 1951 floods and resulted in corresponding benefits below Osawatomie.

Moreover, the reservoir units of the present floo-control programs for the Kansas and Osage Basins operating in conjunction with the reservoirs in upper Missouri Basin and those recommended in the Grand River Basin in Missouri would have controlled the 1951 flood flows in the Missouri River to within the design capacity of the authorized agricultural levee system along the Missouri River downstream of Kansas City and would have prevented damage at urban centers in that reach such as Booneville and Jefferson City, as well on down the Mississippi.

Recognizing that the 1951 floods were of unprecedented magnitude over many areas, our attention was directed—even in the midst of our flood fighting operations—toward the lessons which might be learned from the disaster. To this end, studies were initiated to obtain an analysis of the storms which caused the floods, an analysis of the flood runoff, and a detailed appraisal of the flood damages. The gathering and reporting of such data is one of our normal functions subsequent to any flood. Realizing the magnitude of the problem a large staff was assembled to cope with it. Trained and experienced engineers were drawn from our offices in all sections of the country to assist in the work. Rapid assembly of the mass of information and data required for sound analysis and conclusions was possible only with assistance and cooperation of a great many sources; prominent among these were the United States Weather Bureau which furnished rainfall data, the United States Geological Survey which furnished stream stage and discharge information, and a vast array of private individuals, companies, and local, State, and Federal agencies who furnished data and information on flood heights, extent of flooding, property values, and flood damages. The basic data have been assembled and analyzed. The lessons bearing on flood-control planning, as taught by the 1951 flood, are being applied. Even though incomplete, the study to date has produced results indicative of the course which further flood-control planning should take.

Mr. Carriker, in his presentation to you, has described in graphic terms the extent and magnitude of the damages caused by the 1951 floods These damages were of unparalleled proportions in the aggregate. They specifically called attention to economic development heretofore not dangerously threatened by floods, and also increases in economic development which have taken place in our flood plains since they were last studied.

Mr. Van Orman, in his talk, pointed out that during our studies, the July storm was moved or transposed to more critical positions over the Kansas and Marais des Cygnes Basins. This is identical to what had been done with the storm which produced the 1903 flood, formerly the greatest of accurate record. In these previous studies a flood much larger than that of 1903 was anticipated and works were planned to control it. Now, transpositions of the 1951 storm show that on

a part of the area an even greater flood can be expected to occur within a normal lifetime. For example the transposition of the 1951 storm a few miles north of its actual occurrence would produce 676,000 cubic feet per second at Kansas City which is one-third greater than the actual 1951 discharge.

We would be negligent as engineers not to recognize this eventuality and to design accordingly.

Among the tools by which we seek to provide adequate control of floods are the reservoirs, local protection works, and increased channel capacities and other improvements which can be employed within the limits of site availability and economic cost. Analysis of the 1951 flood led to the inescapable conclusion that all such potentialities must be employed to the full economic limit if the recurring flood damages are to be alleviated in the stricken rural and urban areas. Prior to the 1951 flood many potential reservoirs and local improvements for flood control had been studied. From these the most effective and economical units had been selected to constitute the present flood-control programs in the Kansas and Marais des Cygnes-Osage Basins which I have previously outlined. While the need for more units has long been recognized they were not recommended for construction heretofore because their economic justification could not be demonstrated. The rapid expansion of urban and rural developments in these basins and the data provided by the 1951 flood now make mandatory a further appraisal of the flood-control programs.

In our current studies known potential units are being reexamined and new ones developed. From these, an expanded system of potential flood-control works has been cataloged for each of the basins which may be further expanded as the study progresses. These potential works are shown on the maps displayed here before you. One map shows the Kansas Basin and the other the Marais des Cygnes-Osage Basin. Triangles designate reservoirs and circles designate local flood-protection projects. As you can see, many potentialities widely distributed over these basins have been under investigation. Nearly 150 reservoirs and nearly 50 local flood-protection projects have been given serious consideration.

Our studies conclusively demonstrate that at this time certain of these units are basic to adequate flood control. Because they were selected on the basis of achieving the desired effectiveness with maximum economy, the reservoirs and local protection units in the present flood-control programs still prove to be of primary importance. However, the programs must be augmented by the inclusion of additional basic units. The additional units have been selected for study on the same basis of effectiveness and economy to provide alleviation of flood damages in areas which suffered extensive destruction. The expanded programs comprising the basic units have been analyzed on the basis of effectiveness in flood-damage reductions. They are found to be the units that will yield the greatest return on the investment and will do the most good for the greatest number of people. These basic units are indicated on the basin maps by the large triangles and circles.

For convenience in presentation of the basic units, the Kansas and Marais des Cygnes-Osage Basins have been divided into smaller areas. The basic units will be named in a group for each area.

First, let us consider the Kansas River Basin. In the Smoky Hill Basin, from the flood-control viewpoint, control of the following streams, supplemented by local flood protection at Salina and at Abilene, Kans., is a basic requirement:

Smoky Hill River by the Cedar Bluff and Kanopolis Reservoirs.
Big Creek by a system above Ellis and Hays, Kans.
Gypsum Creek system.
Holland Creek Reservoir.
Turkey Creek Reservoir.
Chapman Creek by Sutphen Mills Reservoir.
Lyon Creek by Woodbine Reservoir.

The reservoirs, with the exception of the Big Creek and Gypsum Creek systems, would be most effective along the Smoky Hill Valley and would contribute somewhat to flood reduction along Kansas River main stem. The Big Creek system would be primarily for the protection of Ellis, Hays, and the Big Creek Valley; the Gypsum Creek system primarily for the protection of Gypsum, Kansas, and the Smoky Hill Valley.

In the Solomon-Saline Basin the control can be accomplished on the Solomon River by Glen Elder Reservoir and on the Saline River by Wilson Reservoir. Local flood protection would be required at Tescott, Kans. The reservoirs would

be effective primarily for the lower reaches of the Solomon, Saline, and Smoky Hill Valleys, and the upper reach of the Kansas Valley.

In the Republican River Basin, the basic flood-control units are—

The upper basin subgroup of reservoirs composed of Medicine Creek, Trenton (formerly Culbertson), Enders, and Bonny Reservoirs, primarily for the protection of local valleys.

The Harlan County Reservoir, primarily for the protection of the Republican Valley.

The Milford Reservoir, primarily for the protection of Kansas River Valley below Junction City and the Missouri River below the mouth of the Kansas River.

In the Blue River Basin the basic flood-control units are—

Tuttle Creek Reservoir for the protection of Kansas River Valley from Manhattan to mouth and the Missouri Valley below the mouth of Kansas River.

Hebron, Dorchester, and Seward Reservoirs primarily for protection of local valleys and to supplement the Tuttle Creek Reservoir.

Local flood-protection projects at Beatrice, at Hubbell and at Seward, Nebr.; and at Frankfort and Marysville, Kans.

In the section along the Kansas River from Junction City to Manhattan control of Clarks Creek by Humboldt Reservoir and local flood-protection projects at Fort Riley and Manhattan, Kans., are required.

In the Manhattan-Topeka section control of the following streams is considered essential for adequate flood control:

Vermillion Creek by Onaga Reservoir
Rock Creek by Camp Creek Reservoir
Cross Creek by Rossville Reservoir
Mill Creek by a subgroup of reservoirs (6 units)
Soldier Creek by Grove Reservoir
(All these would be primarily effective for flood reduction in the Kansas River Valley.)
Local flood-protection project at North Topeka, Kans.

In the Topeka-Kansas Citys section adequate flood control requires control of:

The Delaware River by Perry Reservoir
Wakarusa River by Clinton Reservoir
Stranger Creek by Linwood Reservoir
(All primarily effective along the Kansas River Valley, with local protection projects at Lawrence, Merriam, and the Kansas Citys.)

In the Marais des Cygnes the basic flood-control units are:

The Melvern, Garnett, Hillsdale, Pomona, Fort Scott, and Salt Creek Reservoirs and the Ottawa and Osawatomie local flood-protection projects.

These works will be effective in preventing major floods along the Marais des Cygnes River and its principal tributaries in Kansas and will contribute materially to the control of such floods along the Osage River in Missouri.

Presently recommend local flood-protection projects at Ottawa and Osawatomie will require modification for more adequate protection in conjunction with upstream reservoirs. Plans for the protection of the flood plains of the Marais des Cygnes River and its tributaries are currently under study.

In the Osage Basin in Missouri the basic flood-control units are:

The Hackelman Corner, Stockton, Pomme de Terre, and Kasinger Bluff Reservoirs.

These will be primarily effective in the control of floods along the Osage and along the Missouri River below the mouth of the Osage River.

In the foregoing list of basic flood-control units there are 34 reservoirs and 16 local protection works in the Kansas River Basin, and 10 reservoirs and 2 local protection units in the Marais des Cygnes-Osage River Basin. Of the total 62 basic units, 34 are existing, authorized or previously recommended projects which we propose to augment by 28 reservoirs and 5 local protection improvements to provide the degree of protection proven essential by the analysis of the 1951 flood data.

The basic reservoir units in the Kansas Basin will provide roughly 7,600,000 acre-feet of capacity for retention and control of flood waters at strategic points to secure the most widespread benefit from reduction of flood losses in both rural and urban damage centers. I would like to refer to the chart on which is shown

a line representing the flows as they would occur from the transposed storm with control exercised by the basic reservoirs. At Enterprise the flow would be dropped to 190,000 cubic feet per second, which is a reduction of 50,000 cubic feet per second below the actual 1951 flood discharge at this point. The reservoir units which would contribute most to this reduction are Kanopolis, Glen Elder, Wilson, and Turkey Creek. Moving down to Junction City the controlled flow would be 210,000 cubic feet per second, and at Manhattan 220,000 cubic feet per second, both well within the limits of local protection works proposed for Fort Riley and Manhattan. Reservoir units contributing the most important reductions in the reach between Junction City and Manhattan are: Milford, Sutphen Mills, and Woodbine. At Topeka the flow would be controlled to a discharge of 260,000 cubic feet per second, also within the capacity of the levees and flood walls on the south side of the river and those proposed for North Topeka. Flood reductions in the Manhattan-Topeka Reach are provided primarily by Tuttle Creek, Milford, and the 11 reservoirs on the smaller tributaries.

At Lawrence a large concentration of people and property are extremely vulnerable to major floods. Here supplemental local protection works are under critical study to determine the feasible degree of protection. At Kansas City the controlled flow would remain within the levees, provided the bridges are raised and other obstructions to the free flow of the river are removed in accordance with the authorized plan.

You will note on this chart that the flows from the 1951 storm transposition controlled by the basic reservoirs lies well below the discharges which actually occurred during the 1951 flood. This means a substantial reduction in damages to rural areas and in smaller communities along the flood plain between the major damage centers. The chart does not show the stream reaches below each of the proposed reservoirs where more substantial reductions in the flood flows would be realized. Neither does it show the flow reductions that would have occurred to the benefit of urban and rural areas along the lower Missouri River and even on down the Mississippi.

Up-to-date cost estimates for the basic flood-control units, both for the reservoirs and the local protection units, are still being worked on. For this reason I cannot give you the final figures on cost nor the cost figures in detail for the individual units. However, I can say that rough cost totals indicate that the entire basic flood-control program for the Kansas Basin will cost in the neighborhood of $700,000,000 of which about 50 percent is the cost of the existing, authorized and previously recommended reservoirs, 40 percent is for the 22 additional reservoirs, and 10 percent is for local protection projects.

Estimates of the flood-control benefits which would be provided by the basic units are likewise incomplete. It has been determined that the basic units would have prevented damages during the 1951 flood in the order of $645,000,000. Considering this, along with the damage reductions that would be accomplished during another cycle of floods such as that that occurred in the 49 year period from 1903 to date, and considering the provision for controlling a flood or even greater magnitude than that of 1951, it is readily apparent that these basic units are unquestionably justified as a valuable investment in flood control.

In presenting the basic units of the essential flood-control program, I have been concerned primarily with the flood-control aspects. Obviously the programs include many reservoirs which should be constructed for multiple use in order to obtain optimum benefit from the development of the water resource. In fact, the reservoirs which have been established as basic to the flood-control program in the Kansas Basin include Kanopolis, Cedar Bluff, Harlan County, Enders, and others which have been fully coordinated in the final planning stage for operation as multipurpose developments. Such multipurpose use has been fully recognized in the flood-control program. However, in the present study time has not permitted the full coordination essential to the establishment of definite storage allocations to serve purposes other than flood control. This can be done in the future during the detail planning stage for any reservoirs where multiple purpose use is indicated. In such cases, additional reservoir capacity and facilities to serve the collateral purposes can be provided where warranted.

Coordination of the flood-control units with the upper watershed treatment program of the Soil Conservation Service will be made upon concise development of the treatment programs for each of the areas affecting the individual flood-control units. Watershed treatment for prevention of soil erosion and run-off retardation is an important supplement to flood-control works on rivers and waterways. Such treatment has complementary functions, including the reduc-

tion of sediment inflow to reservoirs. These soil conservation programs are obviously not substitutes for engineering works for the positive control of major floods. Soil Conservation Service leaders have repeatedly pointed out that the two methods of improvement are complementary rather than alternates.

Power development in connection with reservoirs of any comprehensive plan is not in prospect for the Kansas Basin nor in the Marais des Cygnes Basin in Kansas. Other water uses, such as domestic and industrial water supply, pollution abatement, fish and wildlife propagation, and recreation can be provided.

I repeat in conclusion, that the flood control measures which I have presented in broad terms constitute the control phase of water utilization and are an economically justified framework on which beneficial use of the water resources can be founded to make the waters work for us rather than remain unbridled in their destructive fury.

GLEN ELDER DAM, KANS.

Senator SCHOEPPEL. Before Senator Carlson and I present short statements, may I say that Mr. C. E. Schneider of Glasco, Kans., is here and appeared last Friday before the Department of Interior Appropriations Subcommittee, regarding Glen Elder Dam. He was interested in this hearing.

Also let me say that Mr. Carl Brown, a farmer of Stockton, Kans., is present. Both of those gentlemen are here today, but are not appearing as witnesses in these proceedings as they found it necessary to attend to some other matters before the reclamation group.

Now, I understand that Mr. Lachlan MacLeay, president of the Mississippi Valley Association, has a very few remarks which he wishes to make.

Chairman MCKELLAR. All right, Mr. MacLeay.

Senator SCHOEPPEL. Mr. MacLeay needs no introduction to this committee, I am sure.

## STATEMENT OF LACHLAN MacLEAY, PRESIDENT, MISSISSIPPI VALLEY ASSOCIATION

TUTTLE DAM AND TORONTO DAM, KANS.

Mr. MACLEAY. Thank you, Senator.

Mr. Chairman and members of the committee, my name is Lachlan MacLeay and I am president of the Mississippi Valley Association, a voluntary nonprofit organization with members in 23 States of the Middle West and the South. The purpose of the association as described in its charter is to promote commerce, industry, and agriculture in the Mississippi Valley.

Since its formation more than 33 years ago the association has had a deep interest in flood control in the valley. It has taken an active part in promoting plans and legislation to help relieve the terrible losses to the people on farms and in cities who have suffered from ever-recurring floods whose ravages and destruction have come upon them so often.

At the last annual meeting of the Valley Association held in St. Louis February 11 and 12, this year, and attended by 953 registered delegates, the following resolutions dealing in particular with the Kansas, Missouri, and Verdigris River Basins were unanimously adopted:

MISSOURI RIVER BASIN

The people of the Missouri River Basin and the economy of the Nation as a whole sustained staggering losses, estimated to exceed $2 billion in a single flood in 1951. The basin and the Nation will remain vulnerable to similar disasters until the authorized program now partially under construction is completed as a whole.

We recommend that the Congress appropriate the funds recommended in the budget for the fiscal year 1953 for carrying this work forward.

Specifically, we recommend that funds be appropriated for work by the Corps of Engineers on the Garrison, Oahe, Fort Randall, Gavins Point, and Tuttle Creek Reservoirs, and the agricultural levees, and for the channel stabilization work from Sioux City to the mouth.

We oppose any delay of appropriations for construction on Missouri River projects pending the investigation and report of the President's Missouri Basin Survey Commission.

TUTTLE CREEK RESERVOIR

We commend the President of the United States for recommending the immediate start of construction on the Tuttle Creek Reservoir in Kansas by proposing $15½ million for this purpose in the 1953 budget.

We urge Congress to support the President's recommendation by appropriating this money in the bill for civil functions for the fical year 1953. This project has been surveyed and resurveyed many times, and planning has been completed. All surveys by competent engineers and others who have studied this project since its authorization in 1938 show there is no substitute location or locations for the presently designed reservoir.

An overwhelming majority of the interests in the Kansas and Missouri River Basins below this reservoir feel that this is a project which should be given highest priority under sections 5 and 7 of the President's criteria for construction of projects during the war emergency.

VERDIGRIS RIVER

Due to recent disastrous flood experience, we recommend that funds be appropriated for fiscal 1953 to start construction of the Toronto Reservoir on the Verdigris River in Kansas, which was authorized in 1941.

We also urge appropriation of additional planning money for Strawn Reservoir on the Neosho-Grand in Kansas.

We earnestly urge your honorable committee to restore to the Army civil functions appropriations bill, H. R. 7268, the full amounts recommended by the Bureau of the Budget which were eliminated or reduced by the House of Representatives.

Mr. Chairman and gentlemen of the committee, for many years the people of the Missouri Basin have lost millions of dollars annually from floods which could have been successfully controlled. Last year (1951) these losses amounted to more than $2 billion property damage and again this year to nearly a billion dollars more. They face the possibility of further devastating floods again this year and in future years.

The figures we have given as losses do not include soil and bank erosion or the loss of wages to employees on farms and in cities, nor does it include losses of trade and credits by commerce, industry, and agriculture. The true losses from these recent floods, if accurately calculated, would certainly amount to a total in excess of $6 billion, and our economy cannot stand such huge drains on its basic resources for very long.

If the United States is to remain strong and prosperous, we must appropriate sufficient funds to build these necessary and well-planned flood-control works and avoid further loss of our precious capital assets.

Land and water are the basis of all civilization and good living. We are allowing these priceless inheritances of ours to be wasted and our good soil washed down to the sea by following a penny-wise, pound-foolish false economy.

We thank you for this opportunity to present our case and we hope you gentlemen of the Senate will restore these eminently fair budget figures and that the House will concur in your wise decision.

I referred to resolutions adopted by the Mississippi Valley association at its meeting in St. Louis on February 11 and 12 of this year, covering its views on the Missouri River Basin flood-control plan, Tuttle Creek Reservoir, and the Verdigris River.

Among other things that are said, there is one thing which I would like to repeat which is as follows:

> We oppose any delay of appropriations for construction on Missouri River projects pending the investigation and report of the President's Missouri Basin Survey Commission.

Our group was very emphatic about that, and I will file this with the committee.

I would like to say to the committee that the damage caused by floods in the Missouri Basin, to my knowledge—and I have been with the Mississippi Valley Association for some time, and I am in my thirtieth year—will run into millions and millions of dollars almost every year. We have flash floods all over the basin which could be controlled. We have had terrific floods since 1943. There have been six floods on the Missouri since 1943.

### 1951–52 FLOOD DAMAGE

The estimated damage of the flood in 1951 was estimated as around $2,000,000,000. The damages this year were estimated at about $1,000,000,000. That does not cover the damage in other fields. That is property damage, gentlemen. That does not cover the loss of wages to farm hands and to city employees who are out of jobs for months at a time. That does not cover the loss of credit and the loss of trade to industry and commerce and agriculture. It does not cover the terrific loss of soil erosion when our topsoil is washed down to the sea and goes down into the lower end of the Mississippi River and is dumped into the Gulf at the rate of 2,000,000 tons a day—and this is not in floodtime.

That is not a healthy situation for us. We are losing our wealth there. We are losing the basic wealth of this country.

Land and water are the foundations of civilization, the foundations of good living, and we are losing our land. It is going down the river with these floods.

Those floods can be controlled, and they can be controlled by the Army engineers' plans. There are no better engineers in the world on flood control than our own Army engineers. They have a good plan. They should be given the money to complete that plan as rapidly as possible. We can control these floods, and we can stop these terrific losses of the wealth of the Nation. That wealth can be saved, and the people of this country will benefit greatly by it.

Thank you very much.

Chairman McKellar. We are very much obliged to you.

## STATEMENT OF HON. FRANK CARLSON, A UNITED STATES SENATOR FROM THE STATE OF KANSAS

### KANSAS FLOOD CONTROL PROJECTS

Senator CARLSON. Mr. Chairman, I want to express my sincere thanks to you personally and to the members of the committee for your patience in hearing this fine group of citizens from our State who are interested in the watersheds of the Neosho, Verdigris, and the Kansas Rivers. You will remember that we were before your committee a year ago and you were kind in helping us to get some appropriations through the Senate.

I want to assure you that I am here today asking that we get some appropriations to start some of these projects on these watersheds as the beginning of a program of flood control.

We must get some action on this if we are going to start to solve this problem. I am heartily in favor of the source control of water runoffs.

In fact, I have appeared before Senator Russell and his committee and have requested funds for two watershed programs in our State. We have to impound some water in Kansas, and I sincerely hope that you will get help us get funds for some of these reservoirs.

Chairman MCKELLAR. Thank you very much.

Senator CARLSON. Thank you, Mr. Chairman.

### SUMMARY STATEMENT BY SENATOR SCHOEPPEL

Senator SCHOEPPEL. Originally, the Corps of Engineers had proposed to operate the Tuttle Creek Dam as a multiple-purpose dam for flood control and water conservation to improve navigation flows on the Missouri and Mississippi Rivers. Subsequent to the 1951 floods, the Corps of Engineers announced that the proposal to hold conservation storage was being abandoned and that the dam would be operated as a single-purpose flood-control dam.

This decision will undoubtedly have an important effect upon local residents who have in the past objected to the dam on the grounds that a large area of land behind the dam would be drowned out permanently by the conservation storage.

I am led to believe that, most of the objections to the dam would be removed if it was used as a so-called dry dam similar to the dams on the Miami River in Ohio. The Miami dams are, of course, much smaller than Tuttle Creek, and because of their small size they are equipped with permanently open outlets instead of the gate controlled outlets usually installed on the larger dams.

I understand that on large dams used solely for flood retention it is considered imperative from the engineering standpoint that the outlets be controlled by gates because it is necessary to have flexibility on the release of the water during flood periods.

When such a large volume of floodwater is being held back by a dam of the size of Tuttle Creek, conditions would frequently be such, that at one period of the flood it might be best to release water quickly while at another time it might be necessary to stop the release of water completely for a short time.

Such varying conditions could not be handled with an open outlet, and gate controlled outlets are therefore necessary.

However, as I understand it, the present plan of the Corps of Engineers to operate the dam solely for flood control places the dam in the same category as the so-called dry dam for all practical purposes.

So the thought has come to me that if we can give some definite assurance by congressional action that the dam will be used only for flood control and that there will be no permanent reservoir behind it, we may be able to meet the objections previously expressed and get on with the building of this so urgently needed flood control project.

I believe this can be done by placing in the appropriation bill suitable language limiting the height to which water can be stored behind the dam except on a temporary basis for flood control only.

I realize that it could not be kept absolutely dry because there is water flowing in the river at all times, but a top limit could be set which would take care of all normal fluctuations of the river during nonflood periods without covering any very substantial land area. This arrangement should remove the objections of those who do not want a permanent reservoir but would agree to a dry dam operation, and it would allow a larger area of tillable lands behind the dam to be kept in cultivation during nonflood periods.

### RESERVOIR CAPACITY

I would like to ask the committee to call upon the Corps of Engineers to comment on this proposal and to give us the technical details as to how it would operate.

I understand that formerly they had allocated 495,000 acre-feet. Under the present plan there is to be no conservation storage and the full capacity would be used solely for temporary flood retention with a small allowance for silting which would be reduced as more conservation practices are installed in the headwater areas.

Now, Mr. Chairman, there is one point that I would like to clear up, namely, can a watershed soil conservation program solve the flood control problem in the Blue River Basin?

### ALTERNATIVE WATERSHED PLAN

In the recent hearings held before the House committee, General Chopening was requested to give his opinion of the various alternative plans that have been proposed. It is significant to note that in response General Chorpening made this statement:

> No plan for upstream measures has been proposed which would have any effect or require any consideration in determining the scope of or need for the project under consideration.
>
> In the discussion of the Corps of Engineers' plan, the report of the Department of Agriculture offered no comment to indicate that the measure under consideration by the Department would produce results that would affect the design, capacity, or justification of the measures proposed by the Engineers.

General Chorpening also stated:

> Neither the office of the Chief of Engineers nor the office of the district engineers have been concerned, nor have they been advised by the Department of Agriculture of any specific plan for the development of the watershed.

Now, that statement was made in January of 1952. In March 1952, I received a copy of the report issued by the Department of Agriculture which dealt with a program of water retardation and soil conservation for the Blue River Basin.

On May 16, 1952, I called the Office of the Secretary and asked to be advised concerning the effect that its program would have on a flood of the proportion that we witnessed in 1951.

I have before me a letter from the Secretary's office dated May 16, 1952, in which this significant statement appears:

> In the event that Tuttle Creek Dam is not built, the watershed program, including small retarding structures, would provide significant benefits from the smaller floods in the mainstream flood plain below the damsite. However, the reduction in discharge for a major flood such as that of 1951 would be relatively small as compared with the effects of a major reservoir such as Tuttle Creek. Hence our programs are not, in any sense, a substitute for major flood-control reservoirs of the kind proposed by the Corps of Engineers for purposes of protecting downstream urban areas.

FAVORS JOINT FLOOD-CONTROL PROGRAM

Now, I am for the Department of Agriculture's program of water retardation and soil conservation 100 percent. But in my humble opinion it cannot replace the necessity of building a dam on Tuttle Creek.

I want to see its program carried out along with the engineers' program.

Mr. STOCKWELL. Mr. Chairman, may I make a brief comment?

Chairman MCKELLAR. Certainly.

Mr. STOCKWELL. I appreciate the statement of Senator Schoeppel. I assure the committee that the Senator is a good judge of the feeling in Kansas and that the people of Kansas recognize his ability as a leader in stating that flood control is the primary interest of the people in Kansas. I assure you that I will heartily support the Senator's statement and stand on Tuttle Creek. It is my conviction that only by an expression of Congress will the Army engineers construct a dam on Tuttle Creek of the dry-dam type and permanently as such.

Senator SCHOEPPEL. I, therefore, prepared a letter urging the Secretary of Agriculture and the Bureau of the Budget to submit the agricultural programs that it proposed not only for my State, but also plans for Missouri, Nebraska, and Colorado immediately to Congress for consideration.

Senators from Colorado, Nebraska, and Missouri joined me in this request.

I would like to see a comprehensive program guinea-pigged in my State, and since the engineers are ready to go on Tuttle Creek, and the Department is now ready in the Blue River Basin I can think of no better time to start than right now.

AMOUNT FOR TUTTLE CREEK DAM

Now, Mr. Chairman, the engineers are requesting $15,500,000 for the Tuttle Creek project. Ten million dollars of this amount was below the Corps of Engineers' ceiling and $5,500,000 above the ceiling.

The budget request was for $15,500,000.

I want to see the project started, but I realize the serious problem that is before each of us in trying to keep expenditures down.

However, there are times when we can be penny wise and pound foolish, and to me this is one of those instances. I, therefore, urge this committee to allow at least the $10,500,000 which the engineers requested below its ceiling so that we can get started.

Now, Mr. Chairman, and Senator Ellender and other members of the committee, I join with Senator Carlson and the other Members of our House group and these other gentlemen who have appeared in expressing our appreciation for your taking the time and effort in carrying through these proceedings in their entirety to conclusion.

I have given a lot of thought and consideration to this matter, not only as it affects my State, but the States downstream.

I don't want a repetition of what occurred last year. None of us do, for that matter.

I want to say that I am hopeful, exceedingly hopeful, of receiving favorable action by your committee with respect to the Toronto Dam on the Verdigris River, as well as on the request for $100,000 for finishing the studies on Strawn Dam.

### TUTTLE CREEK SITUATION

Now, there are some other projects down there which are going to be coming along. I want to go quickly now to the Tuttle Creek situation, the one that has given us a lot of difficulty from the standpoint of how best to approach it. I want to commend to you the statement that was made by Mr. Chandler Jarvis representing the Chamber of Commerce of the State of Kansas who was charged with this responsibility and who did a very fine, in fact a magnificent piece of work in bringing together a lot of divergent views in my State and in focusing attention upon some type of constructive program. Out of that series of conferences came a program that I think is feasible, and out of that program has come a better understanding of that entire situation as it affects my State with reference to Tuttle Creek.

I think the dry dam principle is the principle for us to approach this project on. The Army engineers have approved that principle and have stated that it will eliminate a large conservancy pool which was the big hurdle that we had to get over because of the inundation of so many thousands of acres of land.

I think that with the picture as we have it at present the differences of opinion have been harmonized along certain practical lines, and much of the opposition in Kansas has been eliminated.

Now, I want to express to you again our appreciation for your consideration and kindness and courtesy in listening to the end of our presentation today.

Chairman McKellar. I want to say that no Senators of any State have been more active and more diligent in working for these matters than the two Senators from Kansas.

Senator Schoeppel. Thank you, sir.

Chairman McKellar. At this point I want to file for the record a letter and its enclosures from Gen. Lewis A. Pick, Chief of Engineers, dated March 31, 1952, and addressed to myself.

(The letter referred to follows:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
*Washington 25, D. C., March 31, 1952.*

Hon. KENNETH MCKELLAR,
*United States Senate, Washington 25, D. C.*

DEAR SENATOR MCKELLAR: Knowing of your personal interest in the flood-control problems of the Kansas and Missouri River Basins, I am taking the liberty of furnishing you herewith copies of an interchange of correspondence between the Kansas City Chamber of Commerce and me. The letter from the Kansas City Chamber of Commerce was signed by Chairman Breidenthal and by the mayors of both Kansas Citys.

As I pointed out in my reply to Mr. Breidenthal, and to Mayors Kemp and Tucker, I am strongly of the opinion that any sound water resources development program for the Kansas and Missouri River Basins should include the early construction of the Tuttle Creek Reservoir, primarily for the purpose of flood control. Although I am disappointed that the House Appropriations Committee report included no funds for this important project, I am not discouraged, and will continue with all my ability in support of the President's budget estimate of $15,500,000 for the fiscal year 1953 to initiate the construction of the project.

I would like to call to your attention the fact that in supplemental appropriations for fiscal year 1952, and subsequent to the catastrophic flood of July 1951, the Congress appropriated initial construction funds for the Jamestown and Kirwin Dams in the Missouri and Kansas River Basins respectively. Since these exceptions have been made to the policy of no new starts, it would appear to me to be sound procedure to give careful consideration to likewise including the vital Tuttle Creek project in the construction program.

With kind personal regards,
Sincerely yours,

LEWIS A. PICK,
*Lieutenant General, Chief of Engineers.*

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
*Washington, D. C., March 31, 1952.*

Mr. WILLARD J. BREIDENTHAL,
*Chairman, Greater Kansas City Flood Protection Planning Committee,*
*Chamber of Commerce, Kansas City, Mo.*

DEAR MR. BREIDENTHAL: I have your letter of March 25, 1952, signed by you, Mayor Kemp, Mayor Tucker, and Messrs. Roberts, Kaney, Davis, Gage, and Evans, concerning the initiation of construction on the Tuttle Creek Reservoir on the Blue River above Manhattan, Kans. You can well appreciate my feelings on receiving your letter shortly after the House Appropriations Committee report on civil functions appropriations for fiscal year 1953 was released. As you know by this time, the committee report failed to recommend any funds for the Tuttle Creek project.

I deeply appreciate the fine work which you and your associates have done in support of the early construction of the Tuttle Creek Dam, and in support of the broader flood-control program in your region. Your statement which you inserted in part II of the hearings before the House subcommittee entitled "Why Tuttle Creek Should Be Built Now," is one of the finest, most lucid and coherent expressions of constructive thought on this subject that I have ever seen. It is difficult for me to understand why the construction of this key flood-control dam should be further postponed on the excuse that the recently appointed Missouri Basin Commission should again reexamine facts which have already been studied and restudied time and time again. Also, the House committee report does not appear to be consistent with the fact that, subsequent to your great flood, appropriations for initiation of construction of two new flood-control dams in the Kansas-Missouri Basin were passed in supplemental appropriations bills for fiscal year 1952.

I am firmly of the opinion that any program for water resources development of the Kansas and Missouri River Basins should provide for the construction of the Tuttle Creek Reservoir as one of the earliest and most important features.

House action on the civil functions appropriations bill for fiscal year 1953 will be started tomorrow and by the time you receive this letter it is possible that the measure will have passed the House. In my judgment the possibility

of restoring funds to the project in the House Appropriations Act is very slim; but we can hope that the Senate will take a more constructive attitude in the matter. You may rest assured that everything possible will be done when the problem is under consideration in the Senate Appropriations Committee to support the full amount of $15,500,000 for construction of the Tuttle Creek Reservoir as included in the President's budget. I am taking the liberty of transmitting a copy of your letter and this reply to the chairman of the Senate Appropriations Committee.

Please express my appreciation to the other gentlemen who jointly signed the letter with you, and assure them that regardless of the action taken this year on the Tuttle Creek project, the Corps of Engineers will continue to work to the utmost of its abilities for a sound water resources development program in the Kansas and Missouri River Basins.

Sincerely yours,

LEWIS A. PICK, *Lieutenant General, Chief of Engineers.*

LETTER IN REGARD TO TUTTLE CREEK DAM, KANS.

Chairman MCKELLAR. Next I would like to have inserted in the record a letter to me from Senator Henry Cabot Lodge, Jr., under date of February 18, 1952, to which is attached a letter from the Fitchburg Paper Co. dated February 15, 1952.

(The letters referred to follow:)

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
*February 18, 1952.*

HON. KENNETH MCKELLAR,
*Chairman, Committee on Appropriations,*
*United States Senate, Washington, D. C.*

DEAR MR. CHAIRMAN: Enclosed is a letter which I have just received from Mr. Carl M. Fellows, vice president, Fitchburg Paper Co., Fitchburg, Mass.

You will note that Mr. Fellows expresses opposition to a project identified as the closed dam at Tuttle Creek on the Blue River above Manhattan, Kans.

It will be very much appreciated if you would refer this objection to the appropriate subcommittee of the Committee on Appropriations and direct that it have all possible consideration.

With kind personal regards,

Very sincerely yours,

H. C. LODGE, Jr.,
*United States Senator.*

FITCHBURG PAPER CO.,
*Fitchburg, Mass., February 15, 1952.*

Senator HENRY CABOT LODGE,
*Senate Office Building, Washington, D. C.*

DEAR SENATOR: As a member of the committee on conservation of renewable natural resources of the NAM, as well as a person interested in soil conservation and the protection of our renewable natural resources, I wish to express my opposition to the building by Army engineers of the closed dam at Tuttle Creek on the Blue River above Manhattan, Kans.

This opposition is based on information forwarded to me, which I trust to be correct, as follows:

The dam at full pool will inundate 53,300 acres of fine bottom land, resulting in a loss of earning power of approximately $6,121,233 per year, or for every 10 years an amount of $61,000,000 would be lost, plus taxes.

A study of this project indicates to me that such big closed dams tend to flood our valley land, and it is anticipated that within 50 years they would be filled with silt and become useless.

I am informed that the Blue Valley Study Association has given extensive time to the study of this project and after this study registers their opposition to this plan.

It is recognized that we should have full watershed and headwaters conservation, forestation, check dams, and dry bottom dams as a means of flood pro-

tection. It is my feeling that these could be best developed under local watershed boards and soil conservation districts control, and not under national control.

It would appear that the sentiment in Kansas, as well as in other sections of the country, are against valley authorities, such as the Missouri Valley Authority, and I feel that we should register the same opposition to the development of this work by the President and the Army engineers.

It is hoped that a study of this situation will find you also in opposition to this development.

With kindest personal regards.

Sincerely yours,

FITCHBURG PAPER CO.
CARL M. FELLOWS, *Vice President.*

Chairman MCKELLAR. In addition to the testimony and letters in the record with respect to the Tuttle Creek project the committee has received 216 communications in favor of the Tuttle Creek project and 21 against the project. These letters will not be printed in the record but are available for the consideration of the committee.

At this point in the record I would like to insert a communication from Mr. I. T. Schaaf, city clerk of Toronto, Kans., and a communication from C. E. Hibbard, representative of the thirtieth district of the State Legislature of Kansas, both in opposition to the Toronto Dam.

In addition to these communications the committee has received eight letters in opposition to the Toronto Dam which, although not made a part of the record, are available for the consideration of the committee.

(The letters referred to follow:)

OFFICE OF CITY CLERK,
*Toronto, Kans., May 16, 1952.*

HON. SENATOR MCKELLAR,
*Chairman of Senate Civil Functions Committee,*
*Washington, D. C.*

DEAR SIR: It has been called to my attention that your committee is meeting to consider the Toronto Dam project along with others.

This community has been very much against this large dam that is being proposed near Toronto. We feel that the damage to the valley and farmers above it is as great as the savings below. We feel as we are less than 50 miles from the mouth of the river that a few smaller dams along the creeks leading to the river would be much in tax savings as well as benefit to small farms by using soil-conservation methods.

The people of this small community who are using the sewer that flows into this river would be looking for a new place to operate their water-works system which would be another large cost to someone.

If we get all the good river bottoms covered with water who is going to raise the food for this Nation and large share of Europe?

We ask that you give this a lot of consideration before turning all of our Government to the Army engineers.

Yours very truly,

L. T. SCHAAF, *City Clerk.*

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STATE OF KANSAS,
HOUSE OF REPRESENTATIVES,
*Toronto, Kans., May 16, 1952.*

Senator KENNETH MCKELLAR,
*Chairman of Senate Civil Functions Committee.*

DEAR SENATOR: I wish to protest the building of the Toronto Dam, not only for myself but also for the residents of Woodson County as a whole.

This dam, if built, will take out of production over 2,000 acres of rich bottom land in Woodson and Greenwood Counties.

We have a rural school that has been organized in the last 2 years here in Toronto that, if the dam is built, would necessitate the travel of 25 to 30 miles where 10 now does the same job.

We earnestly believe that smaller dams built to retain these floods would serve the same purpose, and not disrupt the country as a whole and take valuable land out of production like larger dams.

Hoping you may look with favor on these smaller dams, I remain

Respectfully,

C. E. HIBBARD,
*Representative, Thirtieth District, Woodson County, Toronto, Kans.*

Chairman MCKELLAR. Are there any other witnesses?

If not, we are very much obliged to you gentlemen. We will give this matter the best we have.

(Whereupon, at 1:45 p. m., Monday, May 19, 1952, a recess was taken, the subcommittee to reconvene at 11 a. m., Tuesday, May 20, 1952.)